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THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

EDITED BY

GEORGE F. SHRADY, M.D.

Volume 2.

MARCH 1, 1867—FEBRUARY 15, 1868.

NEW YORK:
WILLIAM WOOD & COMPANY;
61 WALKER STREET.

THE NEW YORK PRINTING COMPANY,
81, 83, *and* 85 *Centre street*,
NEW YORK.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

VOL. 2. NEW YORK, MARCH 1, 1867. No. 25.

Original Communications.

THE MEDICAL USE OF ELECTRICITY.

BY G. M. BEARD, M.D., AND A. D. ROCKWELL, M.D., OF NEW YORK.

No. II.

IT was once remarked by a distinguished philosopher that "we may be sure that a science is in its infancy when its advocates are particularly dogmatic in the expression of their beliefs."

Judged by this standard, the science of the medical use of electricity is just emerging from infancy into childhood, for its disciples are far less positive in the declaration of their views in regard to the unsettled points connected with it, than were the original investigators fifteen years ago. A brief survey of the history of recent explorations in this department will fully explain our meaning. In 1850, Duchenne, of Boulogne, published a work entitled, "Exposition d'une Nouvelle Methode de Galvanization, dite Galvanization Localisé," in which he announced the leading idea of his system, namely, that "one can localize the electric stream over a fixed point under the skin, if the end of a conductor be covered with a moist sponge, and strongly pressed upon the skin." In 1855, he published another work, an epitome of five years of experience, entitled, "De l'Electrization Localisé et de son Application à la Physiologie, à la Pathologie, et à la Therapeutique." This book excited not a little attention, and really created an era in medical science. It aroused the enthusiasm of the author's countrymen, who had the opportunity of witnessing his brilliant demonstrations, and was abridged for the German physicians, by Dr. Erdmann. But the number of those who were inspired to enter the list as investigators was comparatively small. Like all the original explorers in this department, Duchenne laid special stress on his physiological experiments. At no era of medical science had there been found any considerable number in any country who were willing and able to devote their lives to purely experimental researches that achieve no direct practical results. While Duchenne had astonished both himself and the scientific world by the novelty of his experience, neither he nor his admirers were fully alive to the immense therapeutical value of his discoveries. As a consequence, the cause of electro-therapeutics would not be espoused by those who felt compelled to turn all their endeavors to practical account, and but very few of those who warmed into enthusiasm over his demonstrations were willing to occupy themselves exclusively in the same field. But Meyer of Berlin, Baierlacher of Nürnberg, Althaus of London, made a specialty of this department, and have published works in which the method of Duchenne is adopted as the basis. Remak, of Berlin, was one of the few who were sufficiently alive to the value of Duchenne's experiments to pursue the subject still further, and in 1855 he embodied his experience in a work entitled "*Ueber Methodische Electrisirung Gelähmter Muskeln*,"—"On the Methodical Electrization of Paralysed Muscles"—in which he announced a system entirely different from that of Duchenne, and became the leader of an opposite school. The leading idea of his work was this: "That in order to bring a muscle to complete contraction, it is far better to excite its motor nerves than to allow the stream to operate upon the muscular substance itself."

Moreover, he employed the galvanic stream almost entirely, while Duchenne had performed his experiments with the faradaic current. Remak reported astounding cures, but at first failed in enlisting the sympathy of the profession. Subsequently, however, he learned wisdom by experience, and became more wary in his statements, and calmer in his manner of expression. Gradually the profession accorded to him their confidence, and some of the ablest minds of Germany—among whom we may name Benedict, Schulz, Meyer, Neumann, Rosenthal, Frommhold, and Eulenberg—are numbered among his disciples. For some time a fierce and unreasonable controversy was carried on between Remak and Duchenne, which, both in its character and in its results, singularly reminds one of the fabled story of the knights who quarrelled over the pictures on the opposite side of the public sign. Remak contended for the application of the galvanic stream on the motor nerves, while Duchenne persisted that the best results were obtained with the faradaic, or induced current, on the muscles themselves.

At a public trial in Paris (as we are informed by Garratt), Remak demonstrated on a living subject that so far as producing contraction of a muscle goes, the induced current applied to the motor nerves is far less painful than when applied to the muscular substance. But so far as the general remedial effects of electricity are concerned, both were in the right, as is now tolerably well established.

So far as is yet ascertained, the remedial effects of electricity, whether employed in the form of galvanization or faradaization, are governed by no fixed laws. Experience is our only guide in their use. All the investigations of scientific men have thus far failed in reducing to any system the different therapeutical effects of the galvanic and the faradaic or induced currents.

Although there has been not a little speculation on this very theme, and although numberless experiments have been instituted with a view to establishing the superiority of the one or the other, yet we believe that the most progressive and candid of the investigators of the present day are willing to admit that the whole subject is yet in chaos. It has been found that the brilliant results that Remak obtained by the galvanic stream can also be secured by the use of the secondary current, and it has also been found that they are, so far as we can judge, very capricious in their effects, setting at defiance all the attempts of inquiring minds to reduce their employment to a logical system.

Those who are accustomed to use the various kinds of electricity, namely, the galvanic or constant stream from a large number of elements, and the primary and

secondary induced current of the electro-magnetic machine, testify that while all are beneficial, *no one* has been found to be so superior to the others as to justify its exclusive use. It has been thought that the galvanic stream was more serviceable in rheumatic and neuralgic affections, and in paralysis dependent on central nerve derangements; but this is very far from being established.

There are cases where at first the induced current acts more speedily than the galvanic stream, which cases, later on, seem to be more amenable to the latter. One day a patient may present himself with a rheumatic disorder that is at once relieved by faradaization, and the next day another patient with precisely the same disease, at precisely the same stage, is more speedily aided by galvanization.

More than that, there are cases which at the beginning of the *séance* are benefited by galvanization, and before its close yield to faradaization. Nay, further, there are instances where one form of electricity seems to irritate for the time being, while the other at once calms and soothes. What, then, is the law of their operation? There is none, so far as can be determined in the present state of our pathological knowledge, and there is no guide to their use except experience. The German investigators have carefully studied the effects of the different forms of electricity in exciting muscular contractions, and they have refined this subject, as it appears to us, to an absurd and profitless excess. Ziemssen has experimented largely on the dead subject, and has ascertained the particular border points that are most susceptible to the electrical influence.

It has been very clearly established that muscular contraction is produced more completely and with less pain when the electrodes are placed on the "border points" where the motor nerve enters the muscle, than when applied to the bellies of the muscles themselves.

With these views of Remak and Ziemssen our experience fully accords. We have found that in certain cases of atrophy and loss of power, where we fail in producing contractions by application directly over the muscles, we do succeed very unaccountably by pressing the fingers along and underneath the borders of the same muscles.

We have found that some inveterate cases of rheumatism that evinced no signs of yielding when the hand was applied in a general way, at once took a favorable turn when the fingers were pressed along and underneath the borders of the muscles concerned.

But important as is this fact, it is hardly worthy of the attention it has received at the hands of some of the German investigators.

Ziemssen and Rosenthal seem to act on the supposition that electricity is chiefly useful in cases of paralysis, whereas its proudest victories have been gained over long-standing dyspepsia, constipation, neuralgia, amenorrhœa, chorea, hysteria, and other disorders connected with enfeebled vital organs, and a deranged nervous system.

On the other hand, we have found that the different forms of paralysis that present themselves to us for treatment give far less speedy and satisfactory results to the electrical treatment than almost any other form of disease. And yet physicians and the laity are possessed with the idea that paralysis is, *par excellence*, the disease that justifies the use of the battery.—Our present knowledge of the therapeutical value of the different forms of electricity may be thus summed up:

1st. Galvanization and faradaization are of so nearly equal value in paralytic, rheumatic, and neuralgic affections, that we are hardly justified in employing one to the exclusion of the other. It would seem that the best results are obtained when they are used with alternations and variations, according to the indication of their effects.

2d. Muscular contractions are excited with the least pain and most speedily when the electrode (either a sponge, a metal, or the hand) is applied along the edge of the muscle, and especially at the border point where the motor nerve enters the muscular substance.

3d. The ascending faradaic current has a great power of exciting muscular contractions, and stimulating the nerves, and is especially indicated in local paralysis, anchylosis, and plastic effusions. Applied through the body with the positive pole at the feet, its effects are not unfrequently very disagreeable.

4th. The *descending faradaic current, thoroughly applied, with the negative pole at the feet, is a tonic and corrective of far greater efficacy than any other remedy or combination of remedies now known to science.* Judiciously given, it can never work harm, save in cases of pulmonary tuberculosis, and in such cases we rarely employ it.

5th. The hand is by far the best electrode, and for the following reasons:

(*a*) It is more effective, from its wondrous power of adaptation. The fingers, better than sponge or metallic electrode, can feel their way along the border of the muscles and press towards the deeper tissues.

(*b*) By no other instrument can the patient receive the same quantity of electricity with so little irritation, particularly when applied on the head, or over any sensitive diseased organ.

6th. *Although paralysis in its different forms is usually more benefited by electricity than by any system of internal medication, it is yet among the least tractable of the various diseases that present themselves for this method of treatment.*

7th. *The diseases which are found to yield most readily and surely to the different forms of electricity in the various modes of application, are neuralgia, dyspepsia, rheumatism of the subacute and chronic varieties, chronic bronchitis, constipation, amenorrhœa, anœmia, hysteria, and general debility.*

8th. The electric streams are of great value as adjuvants in the diagnosis of disease, inasmuch as any deviation from its normal sensitiveness of any part to their influence is readily indicated. In this way we learn where the disease is located, although we may not be able to determine its precise nature.—In order to illustrate more clearly to the profession the method and result of our treatment by faradaization, we propose to give in detail some of the more interesting cases of the various forms of disease in which we have employed it. We can hardly expect that the bare statement of the curative powers of electricity will receive absolute credence without the presentation of some typical examples.

Even Remak himself (as stated above) at first experienced not a little difficulty in gaining the confidence of scientific men. So easy is it to represent on paper what is very difficult to practically achieve, and so ready are specialists to dignify their own peculiar method of treatment to the exclusion of all others, that we cannot hope for the full appreciation of the wondrous powers of electricity, except by those in the profession who may be led to employ the descending faradaic current as faithfully and persistently as we have ourselves.

Neuralgia.—This horrible affection, which so often disheartens both physician and patient, we have found to yield to the persistent application of electricity, as uniformly perhaps as any other disease, unless it may be nervous dyspepsia. Whether it exists either in the weakly or the strong it is always greatly alleviated and

generally cured, sometimes by a few applications, in other cases by a protracted treatment.

Indeed our unexpected success in certain cases did much to stimulate us to make special investigation on the whole subject of electricity.

Case First.—In the latter part of August of last year, Mr. B——, a broker down town, came to our office complaining of a severe neuralgia of the back of the head and neck, that had rendered his life miserable for one year and a half. He had consulted many physicians and had taken much medicine, but had found little relief. He was a tall, well formed, muscular man, with a hard, full face, that suggested great native vigor of constitution.

With not very strong assurance of hope, either on our part or on his, the treatment by the descending faradaic current was recommended and commenced on the 5th of September. He was relieved on the first application, which was a very thorough one, and extended over all the vital organs. On the 8th of September he again came for treatment, and reported himself as much improved. On the 10th he reported himself as being entirely free from pain. Another application was then made, and he bade us good-by, preparatory to going into the country. We could hardly believe that the cure could be anything more than temporary, and were not surprised when he again presented himself on his return and informed us that his old enemy had made him another gentle visit.

We gave him another thorough application. A short time since he called at our office, and informed us that up to that time he had been perfectly well.

Case Second.—Miss H. The following case proves that that most distressing and persisting of all neuralgic troubles, tic douloureux, may be cured where medication has failed.

This patient presented herself for treatment in the early part of September, expressing herself, however, as having but little hope of experiencing more than a slight temporary relief.

Previously she had been treated by electricity with some short-lived benefit; sufficient, however, at that time to inspire her with hope. She was doomed to disappointment, for in a very few weeks the paroxysms of intense pain, which before had made her life miserable, returned with greater severity than ever. As she told her story, the sudden, sharp, shooting pains in her face would every few minutes cause her in agony to hold her speech. To such an extent had this mysterious disease affected her that occasionally her tongue seemed almost paralysed, and at times her utterance was thick and broken. These frequent and terrible paroxysms had left imprinted on her pale face an expression of constant care and suffering. Her own estimate of the value of life was that death was preferable to an existence of such constant agony. Her physician had tried almost everything in the materia medica supposed to be beneficial in such cases; and so without delay, doubting yet hoping, we commenced treatment by faradaization. The patient came every other day, and for the first two or three times only a comparatively mild current was given.

The strength was gradually increased, but no improvement was manifest. After the seventh or eighth application, however, a current, as strong as the operator and patient could well bear, was given for fifteen or twenty minutes, at each sitting, and in addition to the external application, the tongue was thoroughly electrified by means of a metallic spatula. From this time a rapid improvement was noticed.

The paroxysms occurred less frequently and with less severity. She discontinued treatment on the 20th of October, having had no return of pain for three weeks. Up to this date, January 2, she has had, so far as we can learn, no return of her trouble. Whether in this particular case the cure is *absolutely* permanent it is of course impossible to say; but enough is known to convince the patient and those who knew her that the benefit derived was great and incalculable.

Tic Douloureux, as is well known by any who may have had much experience in the application of electricity for the disease, is the most difficult to cure or benefit of all neuralgic affections.

Of the neuralgias, the cervico-occipital, intercostal, lumbo-abdominal, and cephalalgia, are all in the vast majority of cases speedily cured; and although some cases of facial neuralgias, which have resisted all treatment by medication, still fail to be benefited by electricity, yet it is our experience that the great majority even of such cases are permanently cured by persistent treatment.

Case Third.—The power of electricity over neuralgia of a specific character was very well illustrated in the case of a Mrs. B., sent to us by Dr. Cummings.

When she first consulted us she represented that for years she had been suffering from a terrible neuralgia in the head, and which at times attacked other parts of the body. For six weeks the pain had been so severe that she had been unable to pursue her usual avocation, which was that of an operator on a sewing machine. She was a plump, fleshy individual, with full round cheeks, indicative of anything but delicate health. Indeed so vigorous did she seem that we told her that only local applications would be necessary in her case, and accordingly directed her to place her hands on the sheet of copper to which the negative pole was attached, while a very gentle current was passed over the front and back part of the head. The application had not been continued more than two or three minutes, when she exclaimed, "Doctor! my pain is all gone; this is the first quiet moment I have had for a long time."

The sitting lasted about ten minutes, and at its close she was directed to come again on the following day. The next morning she informed us that she had experienced no more pain in her head, but that "the disease had gone to her breast and shoulders." This fact, taken in connexion with some other statements that she had incidentally made the day before, led us to suspect that syphilis was the cause of her sufferings. In reply to questions, she confessed to every symptom of secondary syphilis, and in fact had been aware all along that the disease was in her system. According to our habit in such cases, we made the applications down the spine and over the vital organs. The relief was complete, although not as instantaneous as the day previous. Several times the applications were renewed at intervals of two or three days, and each time she expressed herself as very enthusiastic over the improvement she was making. We examined her throat with the laryngoscope, and found a slight degree of inflammation, which readily yielded to the nitrate of silver. The fifth time she came she reported that she had returned to her work, and was able to labor nearly as hard as at any time in her life. The horrible nocturnal pains had entirely disappeared, and her sleep, which before had been so much interrupted, was quiet and refreshing. There remained, however, some neuralgic distresses in the eyes, which disappeared after a few more local applications.

914 Broadway.

LARYNGOSCOPY.

By J. SOLIS COHEN, M.D.

OF PHILADELPHIA.

No. VI.

DEMONSTRO-LARYNGOSCOPY.—THE EXHIBITION OF A PATIENT'S LARYNX TO OTHERS.

(Continued from page 540, Vol. 1.)

When the epiglottis is well raised we gain a view of the whole circumference of the superior laryngeal aperture. This is triangular, somewhat cordiform, wider in front than behind, sloping down obliquely backwards, and terminating behind in the vertical inter-arytenoidal fissure. Its border is formed in front by the free rim of the epiglottis; then on either side by the ary-epiglottic fold, which arches backwards in the form of a bow until it reaches its arytenoidal attachment posteriorly, where it surrounds a rounded eminence, the cartilage of Santorini; and the two arytenoids, with their connecting muscle and mucous fold, complete the border behind. An enlargement on each side in front of the cartilages of Santorini, and breaking the arch of the ary-epiglottic fold into two unequal festoons, is produced by the inclosed extremity of the staff-like cartilage of Wrisberg surrounded with glands and adipose tissue.

A reflection of mucous membrane runs from one arytenoid cartilage to the other, which, during ordinary respiration, can be distinctly seen forming the posterior boundary of this superior portion of the larynx; but during vocalization the contraction of the arytenoid muscle approximates the cartilages, and the band of mucous membrane folds up, exposing the vertical fissure. The obliquity of this border renders the thyroidal wall of the larynx much deeper than the arytenoidal. Dr. Elsberg, of New York, writes, that in this posterior wall he has detected the presence of tubercles long before the ordinary physical signs of phthisis could be recognised, and that after results verified this early prognosis. Czermak, Stork, Lewin, and others, have recorded similar observations.

If we look down along the inner or laryngeal face of the quadrangular membrane, we will see on either side, about half an inch below its superior border, the red mucous membrane folding under on itself, forming the *false vocal cord*, a broad mucous fold, and leaving between it and the horizontal surface of the true vocal cord, seen immediately below as a white, glistening band extending from before backwards, an oblong interval, which is the ventricle of the larynx, and which leads up into the laryngeal sac. By means of a deep inspiration, especially if short, sudden, and following vocalization, these ventricles can be rendered more distinct, and a separation of their walls be observed dilating the cavity. The size of the ventricles, or rather the space constituting them, varies. It is contended by some anatomists, that these false vocal cords are not merely duplicatures of mucous, or of mucous and elastic membrane, but that they are composed in part of ligamentous tissue (superior thyro-arytenoid ligament) and some muscular fibre. It is generally conceded that they contain a delicate narrow band of fibrous tissue continuous with the fibrous capsule of the laryngeal sac, but destitute of muscular fibre. In the mucous membrane of this sac there open, as first described by Hilton, some sixty or seventy small follicular glands, situated in the submucous areolar tissue. Its laryngeal surface is covered by the inferior portion of the aryteno-epiglottideus muscle (compressor sacculi laryngis of Hilbon) which compresses the sac and discharges its secretions upon the true vocal cords, which, being themselves unprovided with glands, are thus lubricated.

The floor of the ventricle is formed by the *true vocal cord*, which is easily recognised by its semi-metallic lustre—a mother-of-pearly white in the female, with a yellowish dash in the male; a strong, thick, fibrous band (the inferior thyro-arytenoid). The sharp edge of this band constitutes the vocal cord par excellence. This structure, at least its lower surface, is an extension inwards of the vocal membrane, or the middle crico-thyroid ligament. Each cord consists of a compact band of parallel fibres of elastic and fibrous tissue, arranged in prismatic form, the base being outwards, so that a vertical section shows the upper surface horizontal, and the lower surface taking an oblique direction downwards and outwards ≺. Firmly imbedded into the external portion of the vocal cords are some short pennated fibres from the vocal muscle, the thyro-arytenoid, which is adherent and parallel to it, attached in front to the receding angle of the thyroid, and behind to the arytenoid. When the two true vocal cords are approximated, their horizontal surface forms a floor to the upper laryngeal cavity. They form with the space between their free edges *the glottis;* their sharp borders are *the lips of the glottis*, and the chink or fissure between these lips is the *rima glottidis*. These terms should not be confounded. The length of the rima in the male varies from ten to thirteen lines; in the female, from seven to ten lines; in children it is much less, and when dilated the space across will vary ordinarily from three to six lines, but when widely dilated by a deep inspiration, it may be from six to ten lines, leaving a space large enough often to admit a good sized finger. The rima of the glottis is not formed by the vocal cords alone, but also by the inner face of the arytenoids posterior to the points of attachment of the cords; so that we speak of an inter-ligamentous rima corresponding to the length of the cords, say eight lines, and an inter-cartilaginous rima posteriorly, about three lines. Luschka is disposed to decry this division, which is due in appearance to the knuckling inwards of the posterior attachments of the cords when the posterior vocal processes converge inwards.

The form of the rima glottidis varies.—During ordinary respiration it is a narrow interval somewhat enlarged and rounded behind, looking not unlike the lozenge-shaped space formed by pressing together the tips of the two thumbs and the tips of the two fore-fingers, and then extending the thumbs rather strongly posteriorly and the fingers anteriorly, when the space separating the two thumbs will represent the inter-cartilaginous rima, and the remaining space the inter-ligamentous rima. When widely dilated, the rima acquires the form of an equilateral triangle, the base being behind. The form of the rima varies greatly during phonation, and may become elliptical, oval, or circular, as the cords are acted upon by the complex thyro-arytenoid muscle, with portions of which their structure is blended, and by the contraction of other muscles attached to the arytenoids.

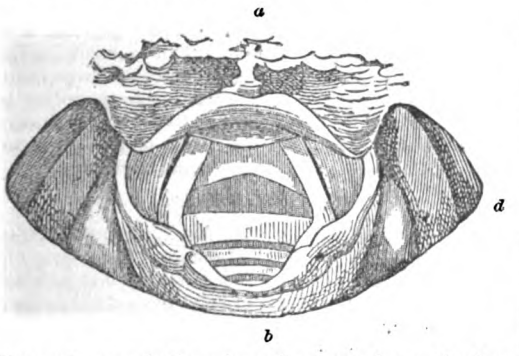
When the epiglottis is well raised from the laryngeal aperture, as by the emission of a high musical note, so that the anterior portions of the vocal cords can be discerned, we often see below the small end of the pad of the epiglottis, immediately beneath the junction of that cartilage to the thyroid, and separating the anterior attachments of the false vocal cords, a well marked, sharply-defined, pinhead-like pit or foramen in the mucous membrane. This is the *fovea centralis* of Merkel, and communicates directly on both sides with the anterior entrance into each laryngeal sac, being continuous below with a shallow groove formed by a short fold of the

laryngeal mucous membrane which stretches across from the anterior end of one vocal cord to the other. This fovea centralis is one of the chief points of insertion for the elastic membrane. Though very small in the human subject, it is said to be quite large in many lower animals, as in the horse, where it seems to constitute a middle ventricle to the larynx.

The anterior and posterior points of insertion of the vocal cords are seen upon them as four yellowish freckles, the *maculæ flavæ*, which mark the positions of the vocal processes.

The mucous membrane, as it passes from one arytenoid cartilage to the other, is thrown into loose folds known as the *commissure* of the arytenoids, and is best seen stretching across when the arytenoids are separated. As these cartilages approach each other, this commissure becomes folded up, as it were, within the vertical cleft or notch, the *arytenoid fissure*, often termed improperly the posterior glottis.

The accompanying figure, borrowed from the monograph of Semeleder, presents such an appearance as would be obtained during deep inspiration with the epiglottis moderately raised, could all the parts figured be seen in a single view.



The parts seen in the mirror from *a* to *b* are, the base of the tongue with its circumvallate papillæ, the indented crest of the epiglottis, a portion of its upper laryngeal face, and part of its belly protruding beneath and cutting off the view of the anterior extremities of the vocal cords; then through the widely opened glottis and beneath the vocal cords, the inferior portion of the interior face of the angle of the thyroid; beneath this, the middle crico-thyroid ligament; then the broad cricoid cartilage, and immediately below it, two or three rings of the trachea; below this we see the posterior border of the laryngeal aperture, formed by the commissural fold stretched between the two separated arytenoids; below this, the posterior external wall of the larynx down to the transverse groove which marks the commencement of the œsophagus.

In the horizontal direction from *c* to *d*, commencing with the lateral boundary of the rima glottidis on either side, we see the true vocal cord disappearing beneath the belly of the epiglottis, which conceals from view its anterior attachment and proximity to its fellow; then directly upon it the entrance into the ventricle of Morgagni represented by a thick, dark line; above, and to the outer side of this, the broad fold of lining membrane constituting the false vocal cord; outside of this, and above it, the ary-epiglottic fold arching inwards and downwards towards the commissure behind to meet its fellow, where is seen a swelling directed towards the interior and formed by the cartilage of Santorini; and further outwards and forwards, a second swelling in the fold, formed by the extremity of the cartilage of Wrisberg. Below this fold, and outside, we see a portion of the exterior wall of the quadrangular membrane; and outside of this, the triangular pyramidal sinus leading down to the entrance into the œsophagus, and bounded on its outside by the wing of the thyroid cartilage. The bright spot depicted in this space corresponds to a point on the inner surface of the thyroid plate, shining through its thin mucous membrane, and the enlargement above this is formed by the greater horn of the hyoid bone.

Under unfavorable circumstances, the view is limited to a portion of the base of the tongue, the edge of the epiglottis, more or less of the arytenoid cartilages, and some portions of the posterior wall of the pharynx.

If we wish to examine the whole laryngeal face of the epiglottis and the anterior extremities of the vocal cords, we direct the patient to sound a high note quickly and with a little force, which effort raises the larynx, closes the glottis, and throws the epiglottis up with a jerk, so that the horizontal surface of the vocal cords is distinctly seen, as well as the false vocal cords and the ventricles. An inspiration accompanied by sound, or an ironical laugh, will bring the same structures in view. If this does not suffice, some of the instruments described (page 349, first volume) for pulling the epiglottis forward may be employed. When a depressed epiglottis prevents a view of the cords, we may judge of their flexibility by the movements of the arytenoids, which can almost always be recognised.

To examine the posterior extremities of the vocal cords, the anterior surfaces of the arytenoids, the arytenoid commissure, and the inner posterior wall beneath, we reflect the light more posteriorly by inclining the mirror towards the horizon during an inspiration, which opens the glottis and separates the arytenoids, which look upwards, backwards, and outwards, exposing their anterior faces.

To examine the posterior walls of the arytenoids down to the cricoid, and obtain a good view into the pyramidal sinuses, we direct the emission of sound, so as to close the glottis; in doing which, the arytenoids approach, exposing their pharyngeal surface, separating more widely the quadrangular membranes from the plates of the thyroid.

To obtain a view further down the trachea than is represented in the figure, we place the mirror more perpendicularly, and direct a deep inspiration, so as to open the glottis to its fullest extent, and then, by a little manipulation, reflecting the light more anteriorly, we may see several tracheal rings as narrow bands, colored like the conjunctival membrane of the eyelid, arching across with their concavities downwards, becoming narrower and closer as they are more distant, until the foreshortening is such that they cannot be distinctly counted; and sometimes in this way, when the circumstances are favorable, such as a good mirror, a steady hand, a well directed light, a straight tracheal axis, a wide glottis, &c., we can gain a view clear down to the bifurcation of the tube. Sometimes, when we fail to obtain such an extended view with the light, patient, eye, and mirror in the ordinary position, we can succeed by elevating the position of the patient so that the eye of the observer shall be below the plane of the patient's mouth; then throwing the light from below upon the laryngeal mirror, which is to be held horizontally, the light can be reflected clear down the windpipe, and we can see most distinctly the increasing foreshortening of the tracheal rings; and if the bifurcation be visible, we see behind the last ring (below in the mirror), instead of the complete arch with its concavity downwards, a bright triangular space, base up, and on either side of this triangular space, which often seems to project up into the interior of the tube, dark, circular discs marking the commencement of the bronchiæ. If the right bronchus

is very straight, sufficient light can sometimes be thrown in to demonstrate more or less of its extent.

A good rule by which to hunt for the view of the bifurcation is, to get a good view of the laryngeal face of the epiglottis, and then, with this as a guide, to continue inspection along this plane right down the anterior surface of the trachea, gradually lessening the obliquity of the mirror as we gain a deeper view.

If, when a view of the trachea has been obtained, we turn the mirror a little to one side, we obtain a lateral view of that tube resembling the turns of the thread in the nut of a screw.

THE MUSCULAR FORCES PRODUCING CHANGES IN THE FORM OF THE GLOTTIS.

Before leaving the demonstrative portion of our subject, it will be necessary to allude to the muscles moving the laryngeal structures, and to whose contractions are due the various alterations of form observed during the performance of the physiological functions of respiration and vocalization.

In the first place, there are several muscles outside of the laryngeal tube.

1. *Crico-arytenoideus posticus*, one on each side, occupies the lateral half of the posterior face of the cricoid, and runs upwards and outwards to be inserted into the exterior posterior part of the arytenoid surmounting the cricoid on that side. *Use*, to rotate the arytenoid outwards and backwards, and open the chink of the glottis. This muscle may be viewed as the extensor muscle of the respiratory glottis, opening the intercartilaginous rima, antagonizing the arytenoideus.

2. *Crico-arytenoideus lateralis*, one on each side, runs from along the superior margin of the sides of the cricoid, obliquely upwards and backwards to the outer angle of the base of the arytenoid, just in front of the insertion of the posterior crico-arytenoid. *Use*, to draw the arytenoid forwards and outwards, turning the posterior vocal processes inwards, and thus contracting the chink of the glottis in vocalization.

3. *Crico-thyroideus*, one on each side; a triangular muscle running from the anterior lateral surface of the cricoid upwards and backwards to the inferior edge of the thyroid plate, and into its inferior horn, leaving an interval between itself and fellow occupied by that portion of the vocal membrane called middle crico-thyroid ligament. *Use*, to draw the thyroid upon the cricoid with a forward rotary motion, thus stretching the vocal cords, rendering them tense and contracting the chink of the glottis.

Then we have behind, the *arytenoideus*, a single muscle, sometimes described as three distinct muscles. A transverse portion, the deepest, goes posteriorly from the whole length of one arytenoid to the other, covering them completely, except at the very tip; over this portion, two oblique portions cross each other, running respectively from the base of one arytenoid to the apex of the other. Sometimes portions of this muscle are continuous with the thyro-arytenoid and the aryteno-epiglottideus, one or both, seeming to act in consonance with them in closing the larynx. In fact, there seems to be a guttural communication right over this muscle with the posterior portion of the ary-epiglottic fold, leading from the ventricle of Morgagni up the inner posterior wall of the larnyx and out into the pharnyx behind. This gutter or drain is the *filtrum ventriculi* of Merkel, and seems intended to lead off into the pharynx any accumulating secretion from the laryngeal pouch.

The *use of the arytenoideus* is to bring the two arytenoid cartilages in close apposition, which it does very completely by means of its transverse and oblique fibres, so that the plane surface of the posterior vocal processes touch each other and thus close the posterior portion of the glottis. This muscle may be viewed as the flexor of the respiratory glottis. So much for the exterior muscles of the larnyx:

In the interior of the larynx we find several muscular structures inclosed within the quadrangular membrane. These are on each side.

1. *Thyro-epiglottideus*, a delicate muscle running from the posterior inner face of the thyroid near its rentrant angle, just outside of the thyro arytenoid, into the side of the epiglottis. *Use.*—To pull the epiglottis down. This it can do ordinarily only when the tongue is relaxed, and, therefore, the dropping of the epiglottis is usually attributed to backward pressure from the base of the tongue relaxing the middle glotto-epiglottic ligament; but it has been shown by the laryngoscope that some persons can acquire such control over their organs as to drop the epiglottis with the tongue extended; and this would seem to confirm the ascribed use of this muscle as a true depressor.

2. *Aryteno-epiglottideus*, a still more delicate muscle, running from the superior lateral portion of the arytenoid into the side of the epiglottis, some of its fibres being lost in the ary-epiglottic fold. This muscle is indistinctly defined horizontally into what is sometimes described as a superior and an inferior muscle, the inferior portion of which (compressor sacculi laryngis, *Hilton*) compresses the laryngeal pouch and squeezes its secretion out upon the vocal cords. The superior portion will constringe the upper portion of the quadrangular membrane, and, with the thyro-epiglottic muscle, assists to close the superior laryngeal aperture.

THE VOCAL MUSCLE.

There is still another intrinsic laryngeal muscle on each side meriting a more detailed mention than that of its mere origin and insertion. This is the *thyro-arytenoideus*, lying external to the vocal cord and inseparably attached to it, from which circumstance, many anatomists have considered the vocal cord but the tendon of this muscle. It is most usually described as parallel to the outer side of the cord, arising from the lower half of the rentrant angle of the thyroid cartilage and from the middle crico-thyroid ligament, and passing backwards and outwards to be inserted into the anterior and outer face of the arytenoid and into its base; its use being to relax the vocal cords and shorten them, thus lessening the length of the chink of the glottis.

The thyro-arytenoid muscle, however, is quite complex in the arrangement of its fibres, and seems to be the vocal muscle par excellence, to whose contractions are mainly due the various changes of forms produced in the glottis during vocalization, cantation, etc. It has been most thoroughly described by Bataille, who has dissected it minutely, as consisting of three distinct portions, for which reason he has proposed for it the name *triceps-laryngea.*

These three portions are called by Bataille, 1, *faisceau plan;* 2, *faisceau médian ou arciform; and* 3, *faisceau paraboloid.*

The three heads arise in close propinquity from the rentrant angle of the thyroid. *The first or plain bundle* runs back with long, flat, horizontal fibres, to be inserted into the inferior border of the arytenoid cartilage. *The second or middle portion* forms a triangular pyramid, separable into two flat triangles, the base being inserted into the concave face of the arytenoid cartilage, its internal surface being adherent nearly throughout to the 1st or flat bundle; and near its arytenoidal attachment it anastomoses again with this flat bundle by short pennate fibres. Its superior surface is concave, and forms the floor of the ventricle. *The third bundle* assumes the

form of an irregular parabola, with fibres divisible into superior, middle, and inferior layers, and sends out fibres of attachment to the 1st and 2d bundles, and also to the internal wall of the ventricle. The upper edge of the 1st bundle is intimately incorporated into the tissue of the vocal cords by short pennated fibres, and forms a large portion of the constituent structure of the cord, especially of its inferior surface.

The above resumé is but an outline of the minute anatomy of this complex muscle, which makes still further attachments to the epiglottis and other adjacent parts; but it is sufficiently descriptive to show its intricate arrangement and intimate relations with the vocal cord, so that it does not seem irrational to infer that it has no slight participation in producing the various changes of form and tension in the glottis, by means of which a narrow band of tissue, scarce eight lines in length, and barely more than a line in breadth, and with but a single margin free to vibrate, is rendered adequate in response to emotion, or mental conception, to execute the immense variety of sound and modulation of which the human voice is capable. There is but little doubt that the careful study of the mechanical construction of this muscle, coupled with a sufficient number of accurate laryngoscopal observations as to the changes of form in the glottis, and consonant action of other parts attendant upon the production of musical tones in the various registers, will in time disclose to physiology many of the secret mysteries of the most distinctive, seductive, and suggestive characteristic of humanity.

MUCOUS MEMBRANE, GLANDS, BLOOD-VESSELS, AND NERVES OF THE LARYNX.

The contour of the larynx, externally and internally, is covered by mucous membrane continued from that of the mouth and pharynx. It differs in thickness and degree of adhesion to subjacent parts. It is exceedingly thin and closely adherent on the free borders of the true vocal cords; thin, but less adherent in the sac of Hilton; loosely adherent to the false vocal cords; thicker and closely adherent on the posterior face of the epiglottis, and on the inner faces of the vocal processes; less adherent to the anterior surface of the epiglottis; very loosely attached to the ary-epiglottic folds and to the arytenoidal walls, which parts are thus extremely liable to become infiltrated, so that the inner surfaces almost touch, producing œdema of the larynx, or, as it is improperly termed, œdema of the glottis.

The epithelium is the ciliated variety found covering the whole mucous respiratory tract, except a narrow stripe of the squamous epithelium of the pharynx, which mounts the larynx posteriorly, continues down the internal face of its posterior wall, and covers the free portion of the true vocal cord from one end to the other. On the inferior face of the cords the ciliated epithelium is again encountered.

The larynx is abundantly supplied with glands. We find them in the laryngeal pouches, the pyramidal sinuses, in the posterior wall, in the ary-epiglottic folds when near their arytenoidal attachments they are accumulated in the form of an L, and are called collectively the arytenoid glands; in the pad of the epiglottis, and isolated elsewhere; but there are none upon the true vocal cords. They are sometimes solitary, sometimes in clusters, and vary from the size of a poppy seed to that of a lentil.

The larynx is supplied with blood by branches from the superior and inferior laryngeal, and the crico-thyroid arteries.

The veins empty into the superior, middle, and inferior thyroid veins.

The nerves supplying the larynx are the superior, and inferior or recurrent laryngeal of the par vagum, with some filaments from the great sympathetic. The inferior laryngeal is the motor nerve, and supplies all the muscles except the crico-thyroid, which, with the mucous membrane, is supplied by the superior laryngeal, which also sends some fibres to the arytenoideus.

THE SULPHATE OF BEBEERINE IN UTERINE DISEASES.

By A. P. MERRILL, M.D.

It will scarcely be doubted that most of the uterine diseases which are treated by surgical remedies with such varying success, are due to, or accompanied by, engorgements of the diseased organ, arising from local and constitutional irritations, inviting into its tissues an undue determination of blood, the natural consequences of which are hypertrophy and derangement of function. According to the degree and duration of this diseased condition of the uterus, there is an increase, decrease, or suspension of secretion, swelling, pain, leucorrhœa, hæmorrhage, and possibly obstruction of the cervix uteri. Displacements are also consequences of this tumefaction, and these are facilitated by vaginal relaxation, which is a constant concomitant.

These are the diseases which have of late years so occupied the minds of uterine pathologists, and led to the invention of mechanical and surgical remedies almost without number. Besides the volumes which have been published on this subject, the medical journals are laden with essays and discussions; but the disagreements among able and distinguished physicians are such, that they who are dependent for their opinions upon the observations of others, are still at a loss to understand the true character of the disease, and the remedial power of the surgical treatment which is so confidently recommended. If, therefore, these morbid conditions of the uterus and its appendages may be relieved in any degree by curative measures which tend to supersede the use of the speculum, pessary, tent, caustic, leech, hysterotome, cervical dilator, and other surgical appliances revolting to female delicacy, it behoves the profession to inquire into their remedial virtues; and the object of this brief paper is, to recommend the sulphate of bebeerine to such scrutiny.

Having occasion, several years ago, to treat a married woman of nervous temperament for periodic fever and neuralgia, and finding that she suffered considerable inconvenience from the action of quinine, I was induced to try the effect of the sulphate of bebeerine as a substitute for it. Relief not being obtained, I proposed to withdraw the remedy, but she objected, saying, although it was of little service to her neuralgic pains, it had promptly relieved her of excessive menstruation, and she wished to keep the medicine by her to answer that indication as occasion might require. Several years subsequently this intelligent lady expressed to me her conviction that she owed to the use of this one remedy her relief from painful uterine disease of long standing, and also from the reproach of sterility.

The sulphate of bebeerine is a remedy for dysmenorrhœa, excessive menstruation, hemorrhage, leucorrhœa, and all uterine disorders dependent, in whole or in part, upon hypertrophy and hyperæmia of the uterus and its appendages. It exercises, also, a tonic power over the kidneys and bladder, and a restraining influence over blennorrhœal discharges. I prescribe it in pills, made up with syrup, in doses of five to twenty grains, and commonly employ aloes as an adjuvant remedy.

Original Lectures.

LECTURES ON PUERPERAL CONVULSIONS.

Delivered in Chicago Medical College,

By W. H. BYFORD, A.M., M.D.,

prof. of obstetrics, etc.

Lecture III.

Uterine symptoms are not uniform; sometimes there are none; for so far as we can judge by examination of the uterus, and observations of the manner of the patient or any complaint, labor in many cases does not commence before the convulsions. Rarely we meet with cases that recover from them and are not delivered for several weeks afterwards. The first case I ever saw, the patient, after having convulsions for twenty-four hours, and ten or twelve in number, recovered perfectly, and in five weeks afterwards was delivered of a fœtus that probably ceased to live at the time she had the convulsions. Where there are no uterine symptoms at first, labor is apt to commence soon after the convulsions become severe, and proceed slowly to a termination, or advance so tardily as not to be complete before a fatal termination of the disease. Again, we often meet with cases where labor is in active progress before the convulsions commence. Where this last is the condition of things, labor is not generally retarded, although occasionally it is brought to a complete stop. The symptoms may show themselves in the second or third stage of labor, or even after the whole process is finished. I knew one patient seized with these convulsions on the third day after delivery. Attacks after labor are more likely to take place very soon—in a few minutes, or a very few hours at most.

The diagnosis is not generally difficult after the affection is completely formed. In a practical point of view, it is quite important to diagnosticate the predisposition to this form of disease, and proper care will generally enable us to perceive the tendency in this direction when well marked. With the nervous and gastric derangement described above, there is œdema of the *upper* portion of the body, upper extremities, or face. While œdema of the legs and feet is more frequently produced by pressure upon the veins coming from the lower extremities, this symptom occurring in the last months or weeks of pregnancy in the upper part of the body, is almost invariably the effect of albuminuria. When this form of œdema shows itself, the urine should be subjected to tests for albumen. Whether uræmia is always present when there is albuminuria, and whether uræmia does not sometimes occur without albuminuria, are questions which have not been positively decided, so far as I know; but we can, with sufficient assurance, regard it as an available rule, that albuminuria indicates uræmia. If albumen is found in the urine, we should prove by tests that there is or is not a deficiency of urea and uric acid in the secretion. These two facts would show a predisposition to puerperal convulsions. The diagnosis, then, of the predisposition is made out by the presence of œdema of the upper part of the body, face, and limbs, albumen in the urine, and a deficiency of urea and uric acid. After the attack has supervened, the diagnosis, for the most part, lies between epilepsy, apoplexy, hysterical and puerperal convulsions. There may be other affections with which there is a possibility of confounding these convulsions. Epileptic convulsions very rarely occur under puerperal circumstances in epileptic patients, and when they do, the convulsive seizure is not repeated. Apoplexy is ushered in sometimes by convulsions of short duration, to which characteristic profound and prolonged coma succeed. The convulsions are not repeated, the patient does not soon become conscious as after the first paroxysm of puerperal convulsions, and there is almost constantly nausea and vomiting with apoplexy. When coma is of more than very temporary duration, there is congestion of the brain, either as the result of the convulsions or as a primary condition; hence, we have a combination of apoplexy and urœmic convulsions as a not unfrequent thing. I think, however, that apoplexy, uncomplicated with uræmia, is quite uncommon in the puerperal state. I remember to have seen only one instance. As I have endeavored to show, in speaking of symptoms, the supervention of this complication is, perhaps, the most frequent cause of death, and it is what must, if possible, be avoided. Hysterical convulsions are distinguishable from the uræmia by symptoms arising from an opposite state than those of apoplexy, constant consciousness, more or less complete, and want of coma properly speaking. In hysteric convulsions, the color of the face is not so deep, the paroxysm is not terminated by carbonic anæsthesia, which shows the existence of apnœa; there is, in fact, almost no embarrassment to the function of respiration in hysteria, while there constantly is in puerperal convulsions. In hysteric convulsions, the muscular contractions are not completely symmetrical, but one arm will be acting violently and the other firmly fixed, and the legs do not move synchronously like shocks that succeed the first general contraction in uræmic cases; and I hope I may be permitted to say, that in hysteria the mental manifestations are perversities of disposition instead of the real inebriety of the uræmic disease. We must remember that they may be complicated, so that in the beginning we may have hysterical symptoms, but these are soon obscured by those arising from congestion of the brain. Perhaps, as in the premonitory condition, the most important items in a clear diagnosis are albuminuria and œdema. Examinations of the urine should be made when practicable.

Prognosis.—This has reference, 1st, to the safety of the mother, and 2d, that of the child. According to Brann, 30 per cent. of the cases, under ordinary circumstances, prove fatal to the mother. My own observation leads me to a more favorable prognosis, and in the practice of my friends and myself, I think 25 would be a large estimate of the mortality of uræmic puerperal convulsions. The particular circumstances influencing the prognosis are various. One of the most important is the time of the attack; commencing before or in the early steps of labor makes the case more dangerous than if it takes place later, for, according to Brann, the accomplishment of labor causes a cessation of the convulsions in 37 per cent. of the cases, their amelioration in 31 per cent. more, and that about 32 per cent. continue without change. There is less danger in post-partum cases than those commencing during labor. Cases in which the inter-paroxysmal coma is profound and persistent, or the breathing and pulse are very much accelerated, or where the bronchiæ seem filled with mucus, and sibilant râle is heard over a large part, or, as is often the case, the whole of the chest, the prognosis is grave; as is also the case, should the convulsions recur frequently, less than every hour, or continue for a long time. Cerebral, pulmonary, and circulatory deviations are the guides to the prognosis. The nearer the breathing and pulse continue to the natural standard, the more favorable the prognosis; the greater their departure from it, in any respect, the greater the danger. This statement needs but very little qualification. The mortality to the *fœtus*, if I can judge from the cases that have come under my own observation, is greater than that to

the mother. I think at least half of the children born during puerperal convulsions were dead. The cause of this great mortality among the children is not clearly agreed upon by the profession. Some think the convulsive action of the uterus cramps the circulation, causing asphyxia. The most likely cause, I think, is the uræmia. I have known two well marked cases of uræmia where convulsions did not take place, but the fœti in both cases were dead-born. In most cases, so soon as the labor has terminated, and the convulsions cease, the albuminuria passes rapidly away, all evidences of uræmic poison disappear, and the patient uninterruptedly convalesces. At other times, several weeks elapse before the excretion returns to its normal state, when the convalescence is interrupted by the occurrence of dropsical accumulations, causing death or tedious recovery, or there may be waning or great nervous prostration and fever. Very early the damage done to the brain is so great as to leave some part of the body or limbs partially or wholly paralysed, or bronchial or pneumonic inflammation may be established sometimes, and not readily subside.

Reports of Hospitals.

BELLEVUE HOSPITAL.

SPEEDY UNION IN A FRACTURE OF THE TIBIA AND FIBULA.—DISLOCATION OF OS MAGNUM.

SERVICE OF DR. FRANK H. HAMILTON.

[Reported by D. M. Cory, M.D., House Surgeon.]

Mary Ann Barrett, æt. twenty-nine, was admitted to Bellevue Hospital, November 12, 1866. On the day of her admission she was thrown upon the sidewalk by a man, who violently kicked her in the left leg. She was immediately brought to the hospital; says her health and habits are pretty good, except that occasionally she indulges in a little strong drink. Condition of leg, swollen and painful; false motion laterally near junction of middle and lower thirds of leg, with projection anteriorly of end of upper fragment of the tibia. The line of fracture is oblique, extending, as is usually the case in fractures of this bone from direct violence, from above downwards, and from behind forwards. The fibula was broken in its upper third, but the extent of displacement could not be ascertained on account of the thickness of the tissues at this point. The leg was shortened about half an inch; otherwise little deformity.

Treatment.—The patient having been placed in bed, the fragments were replaced as accurately as possible by extension applied to the foot. The limb was then snugly placed in a fracture-box, well padded with oakum, and cold evaporating lotions applied to keep down the swelling.

November 16th.—To-day a single enveloping splint was cut from medium sole-leather, and after being soaked in hot water, was carefully moulded to the limb, embracing the entire foot and ankle. This was padded with cotton batting, inclosed in a sack of muslin of the exact shape and size of the splint, and the whole was confined by rollers applied very tightly.

November 17th.—It was to-day noticed, as the fingers were placed upon the point of fracture on the anterior aspect of the leg, that as the patient rose up in bed, the upper fragment would move downwards, and would return again when she was requested to lie down. To obviate this motion, the limb was suspended upon a crib, allowing it free motion in any direction. As the patient was in the habit of using stimulants occasionally, she was allowed two ounces of whiskey daily.

November 26th.—Since the last report, the patient has been allowed to sit up in bed. The rollers have been reapplied from time to time, so that firm and continual pressure might be kept upon the broken bone. To-day she was permitted to get out of bed and to go about the ward upon crutches. The apparatus was readjusted, and union was found to have taken place to a slight degree.

December 12th.—To-day, just one month after the injury, the splint was removed, and union was found to be *firm*. No motion whatever could be produced between the fragments. The swelling has almost entirely subsided, and the limb presents a perfectly symmetrical appearance. When accurately measured, shortening of only three-eighths of an inch was found to exist. To prevent any accident, the splint was reapplied loosely, and the patient allowed to go about as before.

December 16th.—All dressings were removed. The patient can bear considerable weight upon the limb; and as a little stiffness of the ankle-joint remains, she was advised to use it as much as possible.

The special interest attached to this case consists in the fact that speedy union can occur between two fragments of this bone, in which, according to the common experience of surgeons, union is so frequently delayed, by carefully adjusting the broken ends, and holding them firmly in position by the proper apparatus. There is no bone in the human body in which union is so often deferred to the eighth, tenth, or even sixteenth week, as in this bone. It is true, however, that examples of non-union, or a complete and final refusal to unite, are here very rare, showing that there is no natural inherent difficulty in the union of this bone, and that cases of delayed union can generally be referred to a defect in the apparatus used. To follow out the proper indications, it is necessary in the first place, after the side-splints or single splint, whichever is used, have been applied, to carefully adjust the bandage as often as it is in the least loosened either by the diminution of the swelling, or by other causes, so that firm and continual pressure may be kept upon the fragments. In the *second place*, the leg should be swung, to obviate in a great measure the sliding motion produced upon the fragments whenever the patient moves in bed. And in the *third place*, the splints should be made large enough to nearly meet over the spine of the tibia; for unless this is done, the fragments at this point have no support except by merely the roller as it passes around the splints to hold them in position; or what might obviate the difficulty still more, would be to apply an anterior and posterior leather splint, being careful in moulding and padding them, so that the anterior one would not excoriate the thin layer of tissue covering the bone, and the posterior one so that it would accurately fit the uneven surface upon the calf of the leg.

Bridget Malar, æt. twenty-eight, was admitted into the Bellevue Hospital, Nov. 19, 1866. On the day of her admission she fell down a flight of stairs, striking upon the dorsum of her left hand, and flexing it forcibly upon the forearm; she came immediately to the hospital. Condition of hand somewhat swollen and contused, and she is unable to close it. There is a marked prominence upon the dorsum on a line with the second metacarpal bone. At first it was supposed that this was the bone that was dislocated; but in comparing the relative position of this joint with the articulation of the first metacarpal bone with the trapesium, it was found to be the os magnum. Reduction was accomplished by extension upon the first and middle fingers, at the same

time pressure being made upon the bone itself, when suddenly it resumed its natural position. It is now a month after the accident. She still has some stiffness of the hand, and finds it difficult to grasp anything firmly; but she is rapidly regaining the use of it.

Note.—Cases of this kind are extremely rare, and none appear in the case-books at Bellevue Hospital. Dr. Hamilton has never seen one, although in his work on "Fractures and Dislocations" he quotes some few cases reported by English and French surgeons.

EXCISION OF SUPERIOR MAXILLA—LIGATURE OF COMMON CAROTID.

[Reported by Dr. CHRIVLER H. LUDLUM, House Surgeon.]

Catherine McCann, æt. 31, a native of Ireland, admitten August 17th, 1866. She first noticed a small swelling on the upper jaw twelve years ago, which gave her no trouble until four months ago, when it increased in size and became painful.

She entered the hospital June 20th, 1866, and the tumor was removed by Dr. Sayre on the same day. In a few days she was discharged, but the pain continued, and another tumor appeared at the site of the former. This increased rapidly in size, and at the time of her second admission (August 17th), the disease had invaded the whole left side of the jaw, and appeared at the mouth as a fungous, bleeding mass.

Sept. 5th.—Consultation held, and left common carotid ligated, and the left half of the upper jaw and malar bone removed by Dr. Hamilton. But little blood was lost during the operation; the cavity stuffed with lint.

Sept. 6th.—Semi-comatose; does not speak, but swallows regularly; catheterized twice to-day. Hemiplegia of the right side, and paralysis of the left instead of the right side of the face.

Sept. 11th.—Slight hæmorrhage from the roof of the mouth, which recurred occasionally until the close of the month. It was checked by persulphate of iron.

Oct. 3d.—The cavity left by the removal of the bone filled with a fungous mass, which bleeds readily when touched. Glands at the angle of the jaw are swollen and tender.

She continued to grow weaker, and died Nov. 5th, at 6 A. M.

Post-mortem 30 hours after death—rigor mortis not marked, body emaciated.

Brain—The left hemisphere had patches of white softening, especially towards its posterior aspect. The substance of the brain had a purplish-white color, and, except at these softened points, was harder than normal.

Thorax: Lungs—The right lung had numerous abscesses scattered through its substance, but no deposits of cancer were detected. The left lung was healthy.

Abdomen—Liver studded with numerous deposits of cancer, varying in size from a pea to a hazel-nut. There were one or two deposits of the same character in the spleen.

Kidneys contracted, having evidently undergone granular degeneration.

LOCAL ANÆSTHESIA IN VETERINARY SURGERY.—Dr. A. Liautard, V. S., New York College of Veterinary Surgeons, reports the successful use of local anæsthesia in operations upon the horse. Absolute ether was employed upon two subjects: one for the extirpation of a large fibrous tumor of the chest, and the other for the opening of an abscess, while upon another the operation of neurotomy was performed with the greatest ease by the rhigolene spray.

Progress of Medical Science.

NEW METHOD OF EMPLOYING HEAT AS A RESUSCITATING AGENT.—Dr. Joseph G. Richardson, of Union Springs, N.Y., details (*Am. Jour. Med. Sci.*) a very interesting case of resuscitation of a still-born infant, by a novel application of heat. The idea of employing this method was suggested to him by a paper by Dr. B. W. Richardson, of London, on the uses of heat as an invigorator. The infant alluded to was born on the morning of the 18th of February, and at the time made no effort to respire, although a feeble pulsation was perceptible at the præcordia. The usual treatment of hot bath, cold affusion, etc., was of little if any avail, and finally it occurred to Dr. R. to try warming the blood in the peripheric veins, and afterwards forcing it back to the heart. To carry out this idea, the little one was properly protected in blankets, and placed upon the hearth of a large cooking-stove. "The effect of this treatment," says Dr. R., "was almost miraculous; the heart's pulsation, which, in spite of three hours' labor with artificial respiration and its adjuncts, had continued feeble and uncertain, grew rapidly full and energetic; the respiration, which had commenced again to prolong its intervals, changed its gasping character, became continuous, and although groaning, otherwise almost normal; and to crown all, the limbs, which had heretofore dangled, relaxed, from the apparently lifeless trunk, soon exhibited signs of vitality, which, beginning first, after some ten minutes' roasting, with a slight tremulous movement of the extensors of the right leg, gradually traversed the entire muscular system, until the whole tiny frame shook like an aspen leaf, quivering, one might almost think, with too rude a blast of the breath of life. I remained with the infant for an hour or so longer, and experienced the intense satisfaction of observing a continued, though tardy improvement, the skin gradually losing its blue color, and assuming the pink tint of a healthy new-born babe's. The physician being unfortunately compelled to leave the case in charge of an ignorant nurse, who, contrary to directions, had insisted upon administering some molasses and water, death took place in the effort at deglutition." The success attending this new adaptation of an old principle should claim the attention of every practitioner. We have no doubt that many lives may thereby be saved.

DISLOCATION OF THE RADIUS AND ULNA FORWARDS AT THE ELBOW WITHOUT FRACTURE.—A case of this very rare dislocation occurred at *University College Hospital* the week before last, during the frost. A strong young man, of twenty years of age, slipped down on the pavement, falling on his left elbow. On getting up he found he could scarcely move the elbow, which was so painful that he applied immediately at the hospital. On examining him about twenty minutes after the fall, Mr. J. W. Langmore, the house-surgeon, found that there was some swelling and a slight bruise over the prominence of the elbow, with but little swelling elsewhere. The arm was bent at an angle of about 130°, but could be flexed to a right angle and straightened to about 160°, although all movement gave the patient great pain. The forearm was about three-quarters of an inch longer than its fellow. The condyles of the humerus were nearly on a level with the olecranon, which was displaced forwards, the tendon of the triceps muscle being very tightly stretched round the end of the humerus. The sigmoid notch could be felt. The head of the radius could also be felt in front of the lower end of the humerus. Mr. Langmore replaced the ulna by bend-

ing the elbow across his knee, and then, as the radius was still dislocated, he reduced it by pressure on its head, whilst good extension was made by assistants. The arm was then put on a straight splint and an evaporating lotion applied. A certain amount of heat and swelling ensued, but by the fourth day this subsided, and the joint was quite movable.—*Lancet.*

EXTIRPATION OF THE TONSILS.—The *Nashville Journal of Medicine and Surgery* quotes Guersant as follows: "If in young subjects whose throats are narrowed, the hæmorrhage following excision of tonsils is not likely to be troublesome, it is not the same in patients of eighteen or twenty years old. Hæmorrhage, in such cases, is frequently to be feared, because the hypertrophy is of longer standing, and the vessels are more developed. I have operated upon more than a thousand children, and I can scarcely remember three who had sufficient hæmorrhage to cause me any anxiety. On the contrary, I have operated upon twelve or fifteen adults, and I must say that at least four or five of them caused me great uneasiness, and that I could only stop the hæmorrhage by the use of the hot iron or the perchloride of iron. I should say, then, that the operation is beneficial in proportion to the youth of the patient, and grave in proportion to his advance in age."

STEAM TO THE CAVITY OF THE TYMPANUM.—Dr. Hagen, of Leipsic, recommends the use of steam, which is generated in a glass flask, as an application to the cavity of the tympanum, though the eustachian tube, by means of Politzer's method of inflating the cavity of the tympanum (blowing in the air through the nose, while the patient swallows, with the mouth closed). It is said to cause no pain, and to be useful in the case of children suffering from acute inflammation of the middle ear. The manœuvre is to be repeated from three to five times every two or three days.—*Wiener Med. Presse.*

PRURITUS PUDENDI.—Prof. N. S. Davis, of Chicago, recommends as a local application for this troublesome affection, the following lotion, which may also be injected, in small quantity, into the vagina each night and morning:—A solution of borate of soda (borax] ʒ iij., and sulphate of morphia 20 grains in a pint of water.

POISONING FROM NICOTINE.—A patient was brought to the General Hospital in Vienna, in the wards under Professor Oppolzer's care, in what seemed to be a tetanic condition, having been found so on his bed, when he had lain down to rest a short time. He was senseless, but after the injection of ¼ gr. of morphia in solution, in about an hour he began to move his head and gradually his body, without, however, coming to consciousness. An enema of water and vinegar was then administered, when vomiting ensued, and with a small amount of greenish fluid, eight or ten small pieces of tobacco leaves were ejected.

The patient recovered, and said that he had been in the habit of chewing an ordinary cigar, and had lain down with some of the leaves in his mouth. Albumen was found in the urine, the next day after admission, but none subsequently. The patient left the hospital on the seventh day after admission.

MODIFICATION OF THE OPERATION FOR STRABISMUS. By DR. R. LOIBRICH, OF PARIS.—I lift up a fold of the conjunctiva, in tenotomy of the sectus internus, on the lower ends of the insertion of the muscle, cut it with the scissors, pass in through the opening between the conjunctiva and the capsule of tenon; divide these two membranes carefully from each other, up to the plica semilunaris, and separate these, as well as the caruncle, from the parts lying behind. After the entire capsular portion, which is so important in the setting back (sücklagering) of the muscle, is completely independent of the conjunctiva, I divide the insertion of the muscle from the conjunctiva in the usual way, and lengthen the incision in the capsule made with the tenotome, above and below the more extensively, according as I wish the setting back of the muscle to be great or little. I then close the conjunctival wounds with a suture.

The advantages of my method are as follows:—1. A greater freedom and a much larger space for the regulation of distribution (of the effect) of the operation for squint. 2. The avoidance of a sinking in of the caruncle, and of every trace of cicatricial formation, which the ordinary tenotomy sometimes leaves. 3. The avoidance of more than two operations on the same patient, and more than one on the same eye.—*Archiv für Ophthalmologie.*

A CASE OF DISLOCATION OF THE GLOBE OF THE EYE, CAUSED BY THE HORN OF A COW, MISTAKEN FOR AN ENUCLEATION. By PROFESSOR VON BEEKER, OF HELSINGFORS.—The peasant woman A. S., æt. thirty-two, consulted me last September, on account of her left eye. Seeing the sunken eyelid and the half-opened palpebral fissure, which seemed empty, I asked how she had lost her eye? She answered, that the eye had not been removed or lost, as all the people said to whom she had shown it, but that it was simply driven into the head.

She stated, that in June she had gone out, as was her habit, to get the cow. The cow was ugly, and hooked at one of the children who was with her. The mother ran to save her child, but as she bent over to seize it, the cow ran her horn into the left eye, so that she sank to the ground, although it gave her great pain. She rose up, put a handkerchief around her head, and walked to the house, about one hundred steps off; only a very little blood ran from the eye and nose. Once there, she lost her strength. She began to vomit; had severe headache and vertigo, and soon lost her consciousness, so that she did not know what happened for four days. When her senses returned the wound was closed, and the eye itself scarcely pained at all. While sick, she had continuous and severe headache, and could only take liquid food. The left cheek was very much swollen—no sensation, or scarcely any, in it. There was toothache. She could not see well with the right eye, especially near at hand; straining the eye caused headache. In three weeks she was able to go about. Present condition of left eye: Along the supra-orbital border is a cicatrix 25 mm. long; it begins at a point vertically over the puncta and extends, becoming 2–3 mm. broad, to the outer commissure of the lids. The cicatrix is movable, not adherent to the bone beneath. The upper lid is very much sunken in; levator palpebræ still lifts it, so that the palpebral fissure can be opened about 5 mm. The lower lid is stretched tensely in front of the orbital cavity, but is relaxed below, towards the cheeks. The conjunctiva smooth, only slightly hyperæmic. If the lower lid is drawn down, when the reflection of conjunctiva is generally seen, we find an external and internal fold of conjunctiva reclining against the mucous membrane coming from the upper lid, and thereby having a deceptive similarity to the funnel-shaped space left after enucleation. The point of the finger may be introduced into the open palpebral fissure, without any resistance, almost 20 mm. The lachrymal apparatus is normal. If the two lower folds of conjunctiva with the lid are drawn down as much as possible, we may see scarcely two lines over

the supra-orbital border, the upper border of the cornea, the bluish-grey iris, and even a small portion of the moderately enlarged pupil, all healthy and normal. In the upper portion of the visual field of this eye the patient counts fingers with complete certainty. The ocular conjunctiva next to the cornea is white and normal. No movability of the globe to be detected. In right eye the acuteness of vision is one-half; glasses do not improve it. Field of vision defective in outer portion. The ophthalmoscope shows the media to be clear; the retinal blood-vessels a little dilated. Vision has lately improved. Some paralysis of the muscles of the left side of the face. The teeth are said to be sensitive. Sensation exists everywhere in the integument; it is a little blunted in the left lower lid. Both orbital cavities are at the same height.

The patient was put under the influence of chloroform, in order to effect a more thorough examination. The finger introduced around the upper half of the equator of the globe showed that no foreign body was pressing the eye down. From the trochlea of the obliquus superior I felt the belly of the muscle; the eye was then rotated inwards and downwards; the globe was very firmly adherent to the inner and lower side of the orbit. After removing the tendinous adhesions in the neighborhood of the lachrymal sac, I was able to examine the inner portion of the infra-orbital border; there was no unevenness in the bone. I did not attempt to replace the globe, on account of the time which had elapsed, three and a half months, which had caused firm adhesions. Besides, with reposition we could not hope for congruous movements of the globes. If I had been able to dissect up the eye, and place it in its former position, the strabismus would have probably produced extremely unpleasant double images. * * * The concussion or tension of the optic nerve was continued upon the right side, and caused the defect on the outer part of the field of vision, and also the paralysis of accommodation. As to the third pair, the branch going to the levator is unharmed; the other may have been torn by the horn, since there is no movability in the globe.—*Archiv für Ophthalmologie*, xii. *Band, Abtheilung* II.

Action of Baryta and Oxalates.—A pupil of Hoppe-Seyler, several years ago, attributed the toxical action of baryta and its soluble compounds to the accumulation of insoluble sulphate in the capillaries of the lungs, thus causing a mechanical impediment to the process of respiration (*Am. Drug Circ.*). This is denied by Dr. Cyon, who, from a series of recent experiments, feels justified to call the effects of baryta a paralysis of the central organs of the nervous system of the heart, probably by means of its nervous appendages. A similar effect can be traced in the action of oxalic acid and its compounds. The matter is of importance in so far as doubts had arisen as to how far sulphuric acid for baryta, and lime for oxalic acid, might be administered with safety in cases of poisoning.—*Druggists' Circular.*

Othatomata, or Hæmatomata of the Auricle.—At a meeting of the General Association of St. Petersburg Physicians, held April 19, 1866, Dr. Gehewe spoke at some length on Othatomata of insane patients, with a demonstration of some pathological preparations of these tumors. The blood tumor of the ear was first described by F. Bird, of Siegburg, in 1833. Leubuscher, of Halle, called it Erysipelas of the Auricle. Fischer, however, gave the tumors the name of *Othatomata* in 1848. There are still synonyms used, *Hæmatomata* or *Otitis in the Insane.* There is no doubt that the affection occurs also in the sane, although cases have been much more frequently observed among the insane. The symptoms are as follows: There is formed in the fossa between the *helix* and *anti-helix*, or in the *concha*, never on the lobe of the ear, a livid reddish tumor, which in its beginning is generally unobserved, since the patients do not complain of it, and it easily escapes the attention of the physician. It develops quite rapidly to the size of a bean, a walnut, or even to that of a pigeon's egg. The tumor is tense, elastic to the touch, has quite a distinct contour, and on severe pressure is generally painful. To this latter symptom, as in general in the subjective symptoms of the insane, too much credence cannot be given, since sensation is either morbidly increased or diminished in their cases.

The tumor remains in this condition for some days or weeks, finally loses its redness and heat, collapses, becomes doughy; its integument becomes wrinkled, and it either passes into a normal condition, or, in the greater number of cases, leading to deformity of the auricle, either by shrinking or hypertrophy.

Virchow's recent observations have decided with certainty that the hæmatoma of the auricle occurs in exactly the same way, and under the same conditions, as the *cephalatomata* of the newly born—that is, from mechanical, and often traumatic causes. These causes produce a separation of the perichondrium from the cartilage similar in both cases, only with this difference, says Virchow, that in the *othatomata* pieces of cartilage generally remain adherent on certain spots of the loosened perichondrium. Through the investigations of *Meckel*, the conclusion was formed that these portions of the cartilage were new formations, which still further confirmed the analogy with *Cephalatomata.*

In cephalatomata the so called bony ring, which gave to the finger the false sensation that there was a hole in the skull, is only a deposit of periosteum, which first begins to form on those points where the periosteum is elevated from the bone. The periosteum continues to make this bony deposit and finally forms a bony shell over the hæmatoma. This shell is a proliferation of the inner layer of periosteum, from which the new bony layers proceed. Then the function of periosteum—the nourishment of bone—ceases with the separation of the layers by an extravasation of blood; and thus there arises a connected layer of flakes or scales of cartilage and bone. Etiology.—The older authors ascribed the existence of the *othatomata* to a blood dyscrasia, or to an "especial predisposition to an erysipelatous nature." Gudden was the first one (in 1860) to give the mechanico-traumatic origin. His reference to the deformed ears of the heads of the old Grecian pugilists, seen in the Munich gallery, and the literature of the subject, is interesting. The observation has been made, that in the insane the left ear is more apt to be affected with this tumor than the right—this being the one more liable to be struck by the right hand. Gudden, however, goes too far, when he makes the attendants alone responsible for the appearance of othatomata. It may occur from injuries done to the ears by the patients themselves. His idea as to the origin of these tumors is substantiated by the fact, that on a better organization of insane asylums—that is, with a better class of attendants—othatomata are less frequently seen.

The treatment is expectant. On opening the tumor, a viscid bloody fluid or pure blood is evacuated. The wound soon heals.

The belief that *othatomata* generally occur in patients who are hopelessly insane, is not confirmed by the author, who relates several cases, which lead to the opinion that the appearance of the tumors has nothing to do with the prognosis.—*St. Petersburger Medicinische Zeitschrift*, 1866, 4–5 *Heft.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, March 1, 1867.

OUR THERAPEUTICS.

OUR system of therapeutics is getting in a bad way. The physician of the present day has coaxed himself into the comfortable belief that nature is such a trusty handmaid, and is capable of doing so much for him, that he is inclined to leave almost everything that refers to the treatment of disease entirely in her hands. The opinion that the *vis medicatrix naturæ* can, under almost all circumstances, be implicitly trusted, has become so prevalent, that we can hardly be surprised that the important department of therapeutics is almost entirely thrust out in the cold.

It is within the recollection of many that the custom of dosing our patients almost to the death was a duly honored one, and the physician who would not order a score of remedies in a single prescription, notwithstanding he might in so doing openly defy all laws of compatibility, was behind the age; was in fact an unreliable, if not unsafe practitioner. We have certainly learned something since then, but in our zeal to correct the mistakes of our predecessors we have invited a dangerous reaction. We say dangerous reaction, because we believe it to be so in that tendency to neglect, which it has already engendered, and may still further encourage.

Experience and observation have taught us to believe that many of the diseases which heretofore were controllable by certain remedies, have been found self-limited. This fact, in the face of it, carries the conviction to the mind of every medical man that medicines are useless in such maladies, except so far as they may be employed against any complication that may arise. So far, then, we have learned much that is valuable, and are certainly in a measure on our guard against any meddlesome interference.

But are we not, on the other hand, in danger of doing too little? Are we not getting into the habit of being indifferent pilots, caring more to learn the characters and customs of the port to which we are allowing our desperate case to drift, than to study the course of some new and better channel? This we fear is the case. We accustom ourselves to believe that such and such diseases are incurable or uncontrollable, and almost the whole of our attention is given to the pathology of the affection and to conjectures upon the correctness of a diagnosis.

Pathology, as a study, is perhaps more attractive than any other department. The brilliant discoveries that have been made through its agency in increasing our knowledge of the nature of different diseases, are sufficient to account for this. But despite its allurements, there is no reason why it should be studied to the exclusion of other equally important branches, in which that of therapeutics should hold no mean rank.

There seems to be such a lack of disposition to study this particular branch, and to treat it with that detail, care, and conservatism, which it most assuredly claims, that we are in danger of becoming, if not hobbyists, certainly routinists. If this tendency be not checked, we shall soon shut our eyes to everything but two or three remedies, and be ready to use them in our treatment of all diseases. Indeed, that time seems nearly to have arrived. The medical professor will now lecture upon a particular disease; he will give its history, characters, the method of diagnosticating it from others which it may resemble; but when he comes to the treatment of this very interesting affection, how common is it for him to dispose of it in the most cursory manner as if in fact it was of the least importance. The student who has faithfully followed this lecture, has filled perhaps pages of his note-book with the account of the disease, but under the head of treatment, a simple line suffices to write the stereotyped phrase, "*Whiskey*, *Quinine*, and *Iron*."

Therapeutics is not at present, we must acknowledge, a very inviting study. It is so much behind its sister departments that a great amount of labor is required before we can make an even start. But this should not discourage us. Most of our works are made up of much that is useless; of too many remedies that are obsolete, and which have qualities assigned them of which they are as innocent as the paper upon which they are printed; but neither the knowledge of this fact, nor the appreciation of the uncertainty attending the administration of vaunted specifics, nor the conflicting theories regarding the actions of medicines, should allow the science of therapeutics to remain in its present ignominious position.

Far from improving our knowledge of therapeutics as we should, we are virtually going further from our destined goal. We have not only reduced our agents to the smallest possible number, but we do not seem to be disposed to study well even these few. A physician who wishes to prescribe iron, or quinine, would rather for convenience' sake order it contained in some pill compounded in a foreign country, than figure out the ingredients in such respective proportions as will meet the indications of an individual case. It may be possible that these manufactured pills are carefully made up, even though they are compounded on a wholesale scale; but the habit of using them in the indiscriminate

manner now so generally indulged in is, to say the least, unscientific. When a single ingredient is used in a pill or other menstrua, it is not so bad, for then if the manufacturer is reliable, the probability is that the physician will not be working so much in the dark, as he must then recollect what he is using; but when several materials are compounded, is it likely that one not careful enough to write for his own proportion of ingredients would be apt to keep in mind those of another which may be offered him?

All this thoughtlessness in prescribing is, we are convinced, the result of a want of a proper appreciation of the potency of medicines, and their value, when properly used, in modifying disease. The young physician has sneered at the "old fogy;" but the question seriously comes up, concerning the present treatment of disease, whether the "old fogy," who has parted with his idol calomel, cannot return the compliment. In our zeal to support the claims of the advocates of non-medication, we have discarded too many old and well tried remedies, and our only excuse is a flimsy one at best, that their employment heretofore was but the exponent of hobbyism. The manifestation of that same spirit is apparent in the distrust with which every new remedy is viewed, many refusing to give such an article a fair trial, even though its recommendations for favor emanate from a most responsible source. The consequence is, that our list of remedies is being quite rapidly reduced; and if we continue in our present course Materia Medicas will be looked upon as cumberers of the shelf, and our therapeutics will be in the deplorable position of the traditional Job's turkey with one feather in its tail, and that feather will be called—*stimulation*.

THE recent death by chloroform, at Bellevue Hospital, has added another to the list of the victims of anæsthesia. No blame can be attached to any one connected with the case. The gentleman who administered the anæsthetic; used all ordinary care, and the operator, when the patient began to sink, employed every means which science could suggest, or skill put in practice, to ward off the fatal result. All this goes towards establishing the fact that chloroform is a dangerous article, and that we should be continually on our guard against the constantly recurring accidents which are due to its use.

IN another column is published a circular letter in reference to the holding of a convention of medical teachers. The different subjects which are to be brought up for discussion are of immense importance, especially those rererring to this establishment of a uniform rate of fees, and the increased of the lecture term, and the number of professorships. We cannot commend them too strongly to the serious consideration of the different faculties of our colleges, and hope that the call of the committee will meet with a very hearty and general response.

Reviews.

"CONSIDERATIONS GÉNÉRALES SUR L'ENSEMBLE DU SERVICE DES ALIÉNÉS DU DEPARTEMENT DE LA SEINE, SOUVENIRS À M. LE SÉNATEUR, PRÉFET DE LA SEINE." By M. GIRARD DE CAILLEUX, Inspector-General of Asylums for that Department. "RAPPORT SUR LES ALIÉNÉS DE LA SEINE TRAITÉS DANS LES ASILES DE BICETRE ET DE LA SALPÈTRIÈRE." By the same Author. Also, the "RAPPORT ET PROCES-VERBAUX DE LA COMMISSION POUR L'AMÉLIORATION ET LES RÉFORMES À OPERER DANS LE SERVICE DES ALIÉNÉS," Signed M. GIRARD DE CAILLEUX, as Secretary of the Commission.

DURING the last year, a special inquiry has been instituted by the French government into the state of the great hospitals for the insane in Paris, the Bicêtre and the Salpêtrière, and generally into the condition of all the lunatics belonging to the populous department of the Seine. The results of this inquiry are of special interest to us at the present time, when the minds of the profession, as well as the public generally, have been turned to the subject, and when State Legislation is invoked for better provision for our insane poor. It will be seen that this inquiry has terminated in the adoption of reforms of the greatest magnitude, involving the entire subversion of the existing establishments, and the construction of several new asylums to accommodate all the insane of the department, many of whom have hitherto been distributed in the asylums of other departments, more or less remote from the one to which they belonged.

The Commission consisted of three eminent senators, the Procureur-General, one Councillor of State, and Drs. Paul Dubois, Dean of the Faculty of Medicine, Husson, and M. Girard de Cailleux. The Board, at its several sittings, examined numerous witnesses, including several of the most eminent alienist physicians in France, and presented, by its chairman, M. Ferdinand Barrot, an able report of the results of its labors. This report furnishes a very clear insight into the state of lunacy in France generally, and especially in the Department of the Seine; and, at the same time, portrays strongly the aspects of the great lunatic hospitals of the capital, and the reforms which the commissioners suggest.

The report embraces a wide range of topics, such as the "*State of Lunacy in France generally;*" "*Of the Bicêtre;*" "*Of the Salpêtrière;*" "*Medical Service;*" "*Occupations;*" "*Surveillance and Directions;*" "*Religious Services;*" "*Mechanical Restraint;*" *Mortality;*" "*State of the Insane in Provincial Asylums;*" "*Reforms Proposed,*" *&c.**

We have only space for a few items. Most of the physicians visit their patients at eight or half-past eight in the morning, some few at six. When speaking of the medical service, generally, the commissioners take occasion to insist on the greater amount of observation and attention, and therefore *on the longer time* necessary in treating the insane than in prescribing for an equal number of patients in a general hospital, on account of the additional psychological element, which, to render

* In 1884 the insane in France were reckoned, by M. Ferries, at about 12,000, including 8,390 in hospitals, and 3,600 wandering at large, or living with their families, or shut up in prison. Whilst, in 1818, there were only eight institutions for lunatics, in 1886 their number had increased to thirty-nine, viz.: One State Asylum, and thirty-eight departmental. Besides these there were twenty-one hospitals with lunatic wards, and forty-five private asylums. In this year (1886) the insane were numbered at 60,238; of whom 26,289 were under treatment in institutions. The proportion of this total to the then population of France was as 1 to 1,370, whilst in the Department of the Seine the proportion of lunatics under treatment to the population was as 1 to 487.

treatment successful, must be taken into especial consideration, in cases of insanity. This fact has long been recognised both in Great Britain and our own country, where those who have charge of the insane generally reside in the buildings; but with the exception of the *internes*, or *resident pupils*, the attending physicians of all the insane hospitals of Paris reside without the establishments. In regard to *food*, the *dietary* of the two hospitals, Bicêtre and Salpêtrière, is reported to be abundant and of excellent quality, but a regret is expressed that meat is furnished only once a day; the *dress* of the patients, it is stated, leaves much to be desired, the clothes being badly made, and badly fitted, and a source of vexation and annoyance to their wearers. No provision is made for keeping separate the clothes of individual patients; hence there is a want of interest in their preservation, of a feeling of satisfaction in their cleanliness, and of a useful stimulus to order and management or economy. The means of repression or *discipline* resorted to are prolonged baths, the douche, the camisole, temporary seclusion, close cells, and the deprivation of tobacco.

In regard to *occupation*, at the Bicêtre, the insane are occupied in agricultural work, in horticulture, shoemaking, carpentry, cartwright's work and building operations, in painting, blacksmith's work and washing, in brewing, in the piggeries, and in household work. Of 980 male lunatics, 205 of them are employed. At the Salpêtrière, the women are employed in cutting out and making clothes, in household work, and in lint-making. Of 1,431, 827 were employed in these different ways. Of these, as many as 126 were engaged in making lint, 539 in needle-work, and only one in washing. The excess of sedentary work is regretted, and the washing of clothes is recommended as a "suitable work for the women, and favorable for treatment." In regard to *surveillance*, the number of attendants of the Bicêtre is fixed at 116 or 1 to 8.52; at the Salpêtrière at 146, or 1 to 9.10. About 180 men and 230 women attend service on Sundays and great fast-days.

In regard to *mechanical restraint*, while the Commission admit that there are now and then cases of insanity which demand the employment of the camisole or seclusion as exceptional means of treatment, yet it is stated that restraint is much too largely employed at the Parisian hospitals for the insane. At the Bicêtre 27 patients were found wearing the camisole, a proportion to the 980 inmates of 1 in 36. But besides these coerced by the camisole, many others were fastened to their beds. At the Salpêtrière only 18 patients were in any way restrained; which, in the population of 1431, was 1 in 79. *None were confined in their rooms during the day.* With reference to their classification in the two establishments, there were at the

	Bicêtre.	Salpêtrière.
Refractory,	87	188
Criminal Lunatics,	31	—
Semi-tranquil and tranquil,	442	782
Filthy,	92	419
Infirmary,	328, including 203 Epileptics	38
	980	1,427

The mean ratio of registered *recoveries*, between 1839 and 1858, was 1 in 6.27 at the Bicêtre, and 1 in 4.02 at the Salpêtrière. However, among such recoveries are reckoned some who have only been improved. The *mortality* has amounted, on an average, between 1839 and 1858, at the Bicêtre, to 1 in 3.66, and at the Salpêtrière to 1 in 3.29. Several reasons are assigned for this excessive mortality, but the most important would seem to be, first: the confinement of the insane under new and unhealthy conditions, where their physical, physiological, and moral habits are suddenly interrupted and changed; and second, the vicious hygienic condition of the localities in which the establishments are placed. The *seats of disease* causing death are, in the order of frequency, the head, the abdomen, and the chest.

The cost of the patients is thirty cents a day, for the men, and twenty-five cents a day for the women, but the Commission state that this might be reduced for both sexes to twenty cents a day, if the patients were placed in properly organized asylums.

The general result of the inquiry is, that the Bicêtre and Salpêtrière are inadequate to their purposes, and need to be radically reformed. Their several sections are defective, and too often vicious both in their architectural and medical arrangements, and the different quarters deficient in unity of co-ordination. Some of them are neither safe nor salubrious for their inmates. The dormitories are overcrowded, and classification incomplete. The refractory are not under adequate control and supervision, the use of restraint is much in excess, the number of dirty patients far too great, the medical service imperfect, *surveillance* difficult and badly organized, the means of occupation insufficient, the clothing leaving much to be desired, and there is an intermixing of inmates prejudicial in itself and contrary to law, which demands a remedy as soon as possible.

We pass over many interesting details, to quote some of the *reforms proposed.* The following is a *resumé* of the recommendations and conclusions arrived at by the Commission:

I. The creation of special asylums for the insane of the department of the Seine. II. The administration of these asylums directly by the departmental authorities. III. The construction of a central asylum to be situated in Paris, for the reception of all forms of insanity, but especially of acute and recent cases, and in connexion with it a system of clinical instruction. IV. The institution of an office for the admission of patients, to be annexed to the central asylum, where reputed lunatics may be examined and their distribution be determined. V. The erection of asylums out of Paris, and at such distances that the relations between the patients and their friends may be easily maintained. VI. The establishment of especial asylums for insane epileptics and idiots. VII. The new asylums to be so constructed as to receive lunatics of both sexes, yet so as to secure an absolute separation between the two. VIII. The erection of establishments, in connexion with the asylums, for the reception of pensioners at fixed charges; such buildings, however, to be thoroughly detached. IX. The direction of the asylums to be intrusted, if practicable, to one individual, having entire control both over their general government and medical superintendence. X. *The employment of the insane in various useful arts, and particularly in out-door operations.* XI. *The adoption of the system of committing such cases of mental disorder as present no danger to public order and security, to the care of their friends in their own homes.*"

Such are the most important measures of reform agreed on by the commission, after many sittings, and calling to their assistance several of the most eminent alienist physicians of France. The actual number of insane in the department to be provided for, at the date of the commission, was 4216; but taking into consideration the rapid increase of their number of late years, it was resolved to assume 6,000 as the sum-total for which accommodation should be provided.

As to the dimensions which the asylums should have, it was generally agreed that the maximum number to

be received for treatment should be 600, and that, consequently, *ten* new asylums would be needed for the department.

In the case of the Central Asylum in Paris, it was considered desirable to subdivide it into four sections of 150 each, and to appoint a non-resident physician to each, who should give regular clinical instruction and lectures to the medical students of Paris; a resident physician is also to superintend it, and the bureau of admissions. M. Girard de Cailleaux expressed his opinion that, in a scientific point of view, *the smaller an asylum the better it is;* for that the indications of science are to restore to the lunatic, as far as possible, his social position and relations (the *vie de famille*), by supplying in their absence the contact with him of persons of sound mind, and of kind and benevolent character; and that, moreover, the physician can devote the more time to his patients the less numerous they are. The strict deductions from scientific grounds must, however, yield to a certain extent to economical considerations; and he was convinced that not more than 500 or 600 patients should be placed in the same asylum, inclusive of 100 pensioners of various classes, paying respectively $146, $240, $360, and $480, or more per annum. With such an organization, an asylum, costing in construction not more than $500 per patient, exclusive of the cost of site, should by proper management, by agricultural and industrial labor, and by a regulation of the admissions in accordance with the views of the Legislature, cover the interest chargeable on the capital expended in its construction. *This result experience has shown practicable.* At the Insane Asylum at Auxerre, it is stated, the expenditure would have been covered by the receipts, had not an increased number of imbecile gratuitous patients been admitted, and the daily charge for maintenance been reduced in the case of the poor, from one franc fifteen centimes to one franc per day. The commission dwell with much emphasis upon the importance of restoring to the insane, *the usual influences and surroundings of domestic family life* (*vie de famille*), and in order to effect this, of placing them under the influence in the highest degree attainable, of persons of sound mind, a result, as is stated in the Report, to be arrived at only *by division, by instituting small sections or quarters, and by separating the various classes of patients.* It is by such means that the moral status of the insane can be improved, that discipline can be enforced, however chronic their malady may be, and *it is with regard to chronic lunatics that the moralizing influence is the most difficult and more frequently the most useful.* Moreover, every chronic case is liable to pass through the successive phases of excitement, collapse, filthy habits, tranquillity, and turbulence, along with incidental maladies. Hence arises the necessity of establishing, even in asylums that receive only chronic cases, those five fundamental classes, or categories, which are recognised by the French legal enactments relative to the construction of asylums.

The Commission remark that, "if regard be had to the indications of science, as must be indeed, since it is desired to carry out a reform, and to offer to the intelligence of Europe an example worthy of imitation, there must be a division of the insane, *to escape the error of erecting asylums of too large dimensions, and not to follow the example of the English, who constructed fortresses for their unfortunate people, in spite of the impotent protestations of science and experience.* There is nothing, moreover, to be gained in respect to economy in these mischievous agglomerations, if the principles of classification enunciated are adopted. Indeed, in such great asylums, the error now seen in the asylums of the Seine becomes repeated, of dividing the services and of multiplying the general costs, at the expense of breaking the unity of direction and management. True progress is bound up with the multiplication of asylums and their distribution under one sole control." In regard to the proportion of *cells* (equivalent, we suppose, to the *padded rooms* of the English asylums), one to forty of the population was deemed sufficient. We read of no instance where *cribs*, so-called, are used or recommended for the purpose of confining the insane; nor is there any evidence that they have ever been employed for this purpose except in some American asylums.

The asylum of Auxerre, which was visited by the Commissioners, is to be adopted as the model in the construction of the new institutions projected. With reference to their medical staff, it was decided that, in the case of the asylums without Paris, the medical officer should be also the superintendent or director, and have under his control a *steward*, a *secretary*, and a *receiver*. The principles recognised in the management of our own asylums were fully adopted by the Commission, namely, that unity of thought, of interest, of responsibility, of power, and action, is an essential condition for the successful treatment of the insane, and for the good government of an asylum. The compound nature of man, of soul and body, demands, for the most successful treatment of insanity, the combination of pharmaceutical, hygienic, and moral means. To act mentally on the insane, the physician must have complete authority over the attendants and others about his patients, and there is nothing to prevent him engaging in the pursuit of the science of his profession, inasmuch as he can have assistance from others in many administrative details, in the preparation of prescriptions, in conducting correspondence, etc.

In discussing the question of the practicability of providing separately for the curable and incurable, a majority of the Commission voted in the affirmative. It was agreed that about four-fifths of the insane belong to the class of chronic or incurable, and it was conceded generally that those who had not recovered at the end of two years, were not likely to do so. That some few, out of a considerable number, should get well after that period, was held to be no argument against the attempt to separate recent and acute cases of insanity from chronic and probably incurable, particularly as in asylums occupied by the latter, the hope need not be ignored, and the means of cure would not be wanting. On the other hand, it was admitted, *that the separation is desirable on economic grounds, and the cure of recent cases could more thoroughly be cared for in specially adapted asylums of small size, and with a full complement of medical aid.* Moreover, it would be a simple expedient to remove any cases from an asylum for chronic patients to that for recent, or *vice versâ*, when thought desirable; and it would not be necessary to call any of the institutions *asylums for incurables.* No difference of opinion prevailed in regard to the expediency of separating the insane epileptics and idiots from other persons of unsound mind, and of placing them in a special asylum.

The above *resumé* of the reports of this able and learned Commission, will convey some idea, however imperfect, of the magnificent general scheme about to be carried out in the department of the Seine for the management of this most unfortunate class of beings; and it will not be long before we shall find a series of asylums, built after the most approved models, furnished with every appliance for the well-being, the treatment, and recovery of their suffering inmates. In comparison with this well developed scheme of asylums, construction, and management, much of what has been

done in England and in this country, must be looked upon as ill-contrived and ill-executed, and needing, ere long, the reformer's hand.

THE FUNCTIONS AND DISORDERS OF THE REPRODUCTIVE ORGANS IN CHILDHOOD, YOUTH, ADULT AGE AND ADVANCED LIFE. By WILLIAM ACTON, M.R.C.S., late Surgeon to the Islington Dispensary, etc., etc. 2d Amer. from 4th London ed. Phila.: Lindsay & Blakiston. 1867. 8vo., pp. 291.

THE fourth edition of Mr. Acton's most excellent work is before us. The author treats the subject in reference to four important periods of human life, viz. childhood, youth, adult age, and advanced life. He has very carefully incorporated in the treatise what new matter has accumulated since the last edition, besides using the lights of collateral sciences.

As an instance of thoroughness of treatment, we may mention that he does not hesitate to view his subject from a religious stand-point, even referring to sermons preached by Jeremy Taylor and others. The text is enlivened by quotations, one of which, from Lord Bacon, regarding continence, from its aptness as well as sound morality, we cannot refrain from transferring to our own pages. "He that preferred Helena, quitted the gifts of Juno and Pallas; for whosoever esteemeth too much of amorous affection, quitteth both riches and wisdom. . . . They do best, who, if they cannot but admit love, yet make it keep quarter."

Masturbation, Continence, Incontinence, true and false Impotence, Satyriasis, Spermatorrhœa, etc., are fully and ably discussed. The author inclines to the belief that *absolute continence* can be maintained without injury to the individual, thus rebuking the advocates of sexual congress as a cure for sexual torments. He shows that religion, morality, and science may, without other aids, succeed, when working in unison. The painful subject of masturbation is treated with the author's usual firmness and delicacy, and we simply dismiss it with the remark that it does credit alike to the author's head and heart.

We are glad also to see that Mr. Acton pays due deference to the opinion that spermatorrhœa, long the bugbear of the nervous and bulwark of quackery, is rather a disease of the mind than the body, and that the fears of the patient should be allayed as speedily as possible, strict attention at the same time being paid to exercise and diet without any resort to medication, except in desperate cases.

Altogether, the work is to be deemed a classic in its line, from the fact that the only lights which the author has followed in investigation, are those of sound philosophy and science.

METHOMANIA; A Treatise on Alcoholic Poisoning. By ALBERT DAY, M.D., Superintendent and Physician of Washington Home, Boston; with an Appendix, by H. R. STORER, Prof, etc. Boston: James Campbell. 1867. 18mo. pp. 70.

THIS little volume is a treatise on those poisons which first stimulate, then narcotize. The author has had ample means to thoroughly investigate his subject, having had over two thousand cases under his care, a great many of which were suffering under one of the different forms of mania à potu. These, he truly says, vary in symptoms, according as the patient may have been habitually intoxicated a considerable length of time, or have indulged in a paroxysm of drunkenness. The symptoms are well described, but there is not that amount of newness about the volume which we could expect from a treatise more strictly scientific. It is really intended as a warning to the young against the vice of drunkenness, and its attendant crimes—a form of disease which we all know is frightfully prevalent. Looking at the work from a humanitarian point of view, we cannot but hope that it may meet with all the success it deserves, and at the same time are well satisfied that those who have not larger and more elaborate treatises in their libraries can find in its pages much practical information. Perhaps the only objectionable feature about the work is the appendix, by Dr. Storer, wherein he warmly praises Dr. Day for his unflagging zeal in this branch of medical treatment, as well as the Legislature of Massachusetts for passing a law to incorporate an asylum for inebriates, all of which we think unnecessary to the discussion of the subject.

Reports of Societies.

N. Y. PATHOLOGICAL SOCIETY.

STATED MEETING, Nov. 28, 1866.

DR. FRANK H. HAMILTON in the Chair.

RESECTION OF FEMUR FOR MORBUS COXARIUS.

DR. ROGERS exhibited the head and neck of the left femur of a boy eight years of age. Three years ago the patient began to complain of the ordinary symptoms of morbus coxarius, for which he was treated by extension, falling in the mean time into the hands of various individuals. Next he entered the Institution for the Ruptured and Crippled, where he remained under treatment for the greater part of two years. The case came to the Demilt Dispensary a year ago this month. The boy at that time was very much emaciated, there being extensive suppuration from a row of sinuses extending in a longitudinal direction for half the distance down the external and posterior aspect of the thigh. He had hectic fever, night sweats, and his strength was failing so fast that it was not thought he would last very long. On consultation an operation for the removal of the diseased bone was considered advisable, and was performed by Dr. Rogers.

Not only were the head and neck of the bone removed, but a portion of the shaft, in an oblique direction, which had become denuded of periosteum by the track which the pus had taken to escape from the cavity of the joint. At the time the operation was performed there was scarcely anything of the limb left but skin and bone, but by careful treatment the muscles acquired a considerable development, and the patient being presented to the Society along with the specimen gave ample evidence of being able to move the limb with considerable freedom. The operation had been performed only a year since, and the patient had been going to school for the past six months, and was able with the help of a cane to walk with ease. The affected limb was shortened about an inch. Slight rotation outwards and inwards had been preserved to him, and flexion was tolerably free, although of course limited.

Dr. POST called attention to the existence of a small sequestrum at the upper part of the shaft, just below the neck and on the inner side of the bone, which was no larger than robin's shot. He also remarked that there was a remarkable degree of porosity in the remnant of the neck.

DR. ROGERS, in answer to a question, remarked that the treatment subsequent to his operation was substantially the same as that for hip disease by extension. At the time that the patient was allowed to bear his weight upon the limb, aided by crutches, there was no difference in length between the two extremities, but as he began to use it the thigh-bone shoved up a little. Dr. R. did not think that the difference would have been so great, had his injunctions with reference to the gradual use of the

limb been followed. Passive motion of the limb was early resorted to, and to this circumstance was doubtless due the amount of mobility already referred to. He stated that the sinuses on the back part of the thigh were serious obstacles to recovery, and continued to exist long after the wound of the operation had granulated and healed.

Dr. Post thought that the specimen gave evidence of more absorption of the neck than the head.

Dr. Rogers remarked that the displacement of the capsular ligament first described by Dr. Geo. K. Smith, of Brooklyn, as belonging to these cases, was found in the present instance.

A BULLET IN THE HEART FOR TWENTY YEARS.

Dr. Hamilton presented, on behalf of Dr. Balch, a heart, in the substance of which a rifle ball had been imbedded for twenty years of the life of the patient. The following is the history of the case as furnished by the gentleman owning the specimen:

In the year 1840, John Kelley, a boy fourteen years of age, was employed at Chatham Four Corners, Columbia co., N. Y., in driving a horse cart hauling gravel, for the construction of the railroad from Albany to Boston.

One night while in bed in the upper part of a shanty, which was constructed for the workmen, a target rifle was fired from a hill back of the house; the bullet passed through two roof boards and a board partition, and entered Kelley's right shoulder through the upper border of the trapezius muscle about two inches from the acromion process. The physicians who were called probed the wound, and thought they felt the ball about four inches from the point of entrance, the course of the missile being downwards and a little inwards. They decided to let the bullet remain, as they thought an operation was more dangerous than non-interference.

There was a little hæmorrhage and no great local disturbance at the time. In about six weeks the boy was able to resume his work. He gradually gained his health, and to all appearances was perfectly well. He afterwards removed to Clinton co., N. Y., married, and became the father of several children.

In 1845, he was attacked with pneumonia, situated in the upper lobe of the right lung. Dr. Orvill Terry of Redford, Clinton co., N. Y. attended him during this seizure and also his last. During the illness of 1845, for the first time, was noticed a very tumultuous action of the heart, which remained after his recovery from the pneumonia, and continued to increase up to the time of his death, June 14th, 1860; twenty years after being shot, and fifteen after disease of the heart manifested itself.

Kelley's last illness was the result of exposure to the cold waters of a mountain brook, he having gone into them for the purpose of washing sheep a few days before his death. Congestion of the right lung was the result of the exposure. The heart's action became exceedingly violent, and four or five days closed the scene. Two days before his death his right arm and hand became purple and cold.

The post-mortem examination was commenced with the view of finding the bullet and of examining the diseased condition of the heart and lungs.

I dissected the neck; found the right internal jugular vein enlarged, the right external jugular I could not find; I found, however, something that I took to be the remains of the external jugular entering the internal jugular (which is an anomaly of that vein). In the right subclavian artery, pericardium, and other places, I found atheromatous deposits. The upper lobe of the right lung I found congested; other parts of the lung normal; no tubercles anywhere. The heart was enlarged, soft, and flabby; it having undergone Quain's fatty degeneration. The pericardium was very adherent, more particularly on the right side. I had not yet found the ball. A hard lump was felt in the right ventricle, near the apex of the heart; on introducing my finger into the ventricle through the vena cava and right auricle, I ascertained that the lump was in the wall of the right ventricle near the septum, at the most pendent part of the ventricle. On looking carefully at the outer surface of the organ, I could find no cicatrix. I then cut down upon the lump and found it to be a leaden bullet, somewhat flattened, and encysted in the wall of the heart.

Dr. Hamilton remarked that the case had been already published in the *American Journal of Medical Sciences*, but he was not aware that the specimen had ever been presented to any medical society. He stated in this connexion that Dr. S. S. Purple, of this city, in a paper on wounds of the heart, published in the May number of 1855, of the *N. Y. Medical Monthly*, reported twelve examples of gunshot wounds of this organ, in which the patients survived from two days to six years. In the case reported by Fugi the patient lived fourteen days with a ball in the pericardium. Dr. Hopkins, of Ohio, has reported a case in which the patient survived fifteen days with a pistol ball in the wall of the left ventricle. Carnochan's patient, the notorious Poole, lived eleven days with a pistol ball encysted in the walls of the heart. In the case reported by Dr. Randall of Ohio, the patient died on the sixty-seventh day, and three shots were found in the right ventricle and in the right auricle; the wounds having cicatrized. In the *Indian Annals of Medical Sciences* a man is said to have survived ten weeks with a musket ball in the cavity of the left ventricle. Fournie records the history of a man, who, wounded by a ball, fell as if he were dead. Three months after, he suffered from severe palpitations, but which nearly disappeared after three years. He died six years after the receipt of the injury, from some malady unconnected with his injury; and the ball was found lodged in the right ventricle, near the tip, and resting on the septum medium.

Dr. Peaslee did not see why Dr. Balch's patient might not have lived much longer with the ball in his heart, as it did not seem as if death was the direct result of its presence in that organ. The palpitation which the patient suffered was in his opinion probably increased by the extra labor thrown upon a heart already crippled. Beyond this increase of the heart's action to overcome the weight of the ball, and the effect of its presence in somewhat embarrassing the action of the organ, there was nothing unusual. He observed that the missile in this instance had perforated the muscular wall, and was lying in contact with the attached surface of the endocardium.

Dr. Rogers thought that inasmuch as there were no signs of a cicatrix upon the walls of the ventricle, the ball might have found its way to that situation by entering one of the large vessels, dropping down, and passing though the endocardium.

Dr. Hamilton confessed that he had formed no theory upon the subject, but stated that he believed Dr. Balch was of the opinion that the missile had entered the heart from within.

Dr. Jacobi asked how such a circumstance as the wound of so large a vessel could be conceived without the occurrence of hæmorrhage?

Dr. Hamilton, in this connexion, referred to a case on record in which the carotid artery was wounded by a ball which plugged up the proximal side. The patient died of secondary hæmorrhage from the distal extremity.

Dr. Post remarked that he had reported a somewhat similar case of wound of the vertebral artery, death

taking place several days after from secondary hæmorrhage. He also stated it as a well established fact that wounds of the large vessels near the heart were much more promptly fatal than similar wounds of the walls of the heart itself.

Dr. Flint was of the opinion that a ball of the size in the specimen presented would, if it entered the cavity of the ventricle, be driven by the current of blood into the pulmonary artery.

Dr. Peaslee suggested that, supposing the ball entered the heart from within, the only available vessel that could be wounded for such a purpose would be the superior vena cava.

Dr. Finnell stated that in Poole's case there was no sign of a cicatrix upon the external surface of the heart. A careful search was made for some track of a ball, but none being found, the heart was placed aside and the examination continued. At length one of the gentlemen present only by accident discovered the ball in the substance of the heart.

Dr. Hamilton remarked that an interesting point in Dr. Balch's case was that no syncope followed the receipt of the injury to so vital an organ. In Poole's case, the shock was so violent that his comrades at first thought him dead; so in the case of the man who survived six years.

SYPHILITIC NECROSIS OF SKULL.

Dr. Hamilton presented an example of syphilitic necrosis of the skull. The specimen consisted of the crown of the skull, and was made up principally of the upper portions of the two parietal bones. It was removed by operation on the Monday preceding. He exhibited the specimen more for the purpose of bringing out a point of some interest, which was in effect that the bone, although extensively necrosed and worm-eaten, was really not dead at the time of its removal. At the time of the operation he found this portion of bony tissue firmly adherent by extensive granulations to healthy parts beneath; the granulations extending into the very interior of the diploic tissue. When the bone was separated from these connexions, the hæmorrhage was very profuse, so that in a very short time the patient lost nearly a pint of blood. He believed that the existence of these granulations explained the reason why the bone was absorbed; in fact, he considered that these vessels were the only agents by which absorption could be carried on.

The specimen also showed that the disease was confined to the periosteum. A considerable portion of bone, which though dead had not shown any signs of separating, still remained. The patient did well after the operation, and at the time of reporting the case was able to sit up.

PLEURISY IN AN INFANT.

Dr. Lewis Smith exhibited a specimen of pleurisy in an infant. The patient died at the end of three months and fifteen days, without having any conspicuous symptoms, and without the usual courtesy of a diagnosis. On post-mortem examination the left pleural cavity was nearly empty, the lung occupying only about one-sixth of the space allotted to it. This organ was firmly bound down by fibrous material, which also covered the costal pleura. On attempting to inflate the lung, the air escaped though a small opening in the centre of a solidification in the upper lobe. This solidification was not due to pneumonia, but probably to pulmonary apoplexy.

He also presented a second specimen of pleurisy in an infant who died at the age of seven months. In this instance a diagnosis was made of pleuro-pneumonia, which was confirmed by a post-mortem examination. The left lung was found to be the seat of the pneumonia, and the overlying pleura was not only inflamed, but that portion of the membrane extending beyond the margin of the inflamed lung.

The Society then adjourned.

EAST RIVER MEDICAL ASSOCIATION.

Adjourned Meeting, January 4, 1867.

Dr. V. Morse, President, in the Chair.

HEREDITARY TENDENCY TO THE HÆMORRHAGIC DIATHESIS.

Dr. Thoms read a paper with the above caption.

Cullen has observed that children are most subject to the diseases of the parents whom they most resemble; it is rational, however, to suppose that the mother exerts the more powerful influence in giving an impetus to the tendency. In support of this latter view, it should be remembered that in the crossing of animals, the relative influence of the two sexes is quite manifest; e. g. a mule, the issue of the mare and the ass, is incomparably larger and stronger than the product of a pair where the sexual relations are reversed.

The laws governing the transmission of diseases are various, and it is only by aid of exact and numerous observations, which from necessity can only be slowly accumulated, that we are enabled to appreciate the relative frequency of a particular disease in individuals exposed to a suspected hereditary taint, and in those who are not obnoxious to any such influence.

In consideration of hereditary hæmorrhagic diathesis, the solution of the problem is to be sought for rather by carefully studying the course of the lives of the children themselves, than by tracing out the morbid genealogical tendencies of ancestors.

Dr. T. then quoted the following quaint account of a family predisposition to hæmorrhage, reported by Drs. William and Samuel Bual, and which was published in the *Physico-Medical Transactions* in 1817.

"The subjects of the following account were the descendants of the Rev. Timothy Collins, the first pastor of the town of Litchfield, Conn. So far as we have been able to ascertain, the first manifestation of hæmorrhagic predisposition was in the male children of his son Oliver. We cannot, by diligent inquiry, learn that there were any indications of this disposition in any of their predecessors on either the male or female side. Oliver Collins had several sisters and brothers who had children to the second and third generation, in none of whom do we find that there has been any manifestation of the hæmorrhagic trait.

"Oliver Collins had four sons and two daughters. In all of the sons this predisposition discovered itself in an extreme degree, from early infancy, and continued through life. Three of them bled to death. It is not known where the fourth is, or whether he is alive. Two of them, though frequently reduced by hæmorrhage to a state of exhaustion threatening the extinction of life, lived to adult age. One of them eventually died from hæmorrhage induced by the extraction of a tooth; the other from hæmorrhage following a slight contusion of the fore-finger. The one which died in childhood, bled to death from a slight laceration of the tongue by the teeth, occasioned by a stroke under the chin. It is related of these persons, that after experience had taught them their liability to hæmorrhage, they acquired an extreme sensibility in relation to their danger, shuddering at the sight of edge tools, and avoiding with the utmost caution all exposure to them.

"The next appearance of a disposition to bleeding was

in the son of Mrs. Baldwin, one of Oliver Collins's daughters. It may be noticed here that the other daughter, Mrs. Garty, has both male and female descendants, in none of whom has this hæmorrhagic constitution appeared; Mrs. Baldwin's son possessed it in an equal degree with his uncles. He lived, we believe, till near the age of puberty, when he bled to death from a slight wound caused by the fall of a pewter plate on his foot.

"The last instances in which this family characteristic has discovered itself are the male children of Mrs. Kilburn (a daughter of Mrs. Baldwin). She had four sons, in all of whom a tendency to bleeding has been strongly marked since early infancy. In her daughter it has been absent. Two of her sons have already, in childhood, fallen victims to hæmorrhage. Another son, who was drowned at the age of eighteen months, had exhibited the hæmorrhagic predisposition as strongly as did his brothers; and once bled almost to death from a rupture of the frænum of the upper lip. The death of one of the boys was caused by a hæmorrhage proceeding from a wound produced by a stab penetrating the bottom of the foot. He died in about forty-eight hours from the time of receiving the injury. His brother died after extreme exhaustion induced by nasal bleeding. He had an abscess in the leg, which discharged a short time previous to his death, and which may have co-operated with the loss of blood, in exhausting the powers of life. The only surviving son has been frequently reduced to a state of exhaustion threatening life, by hæmorrhage from the nostrils, small lacerations of the frænum of the upper lip, and slight wounds in various parts of the body.

* * * * * *

With regard to the Kilburn branch of the Collins family, but little remains to be said. Indeed, a number of years have elapsed since the deaths of the other victims of this remarkable predisposition. We may, however, premise the general remark that we cannot discover that there has been, in any instance, in the female connexions of the Collins family, any evidence of hæmorrhagic trait.

"It may be remarked of the Kilburn boys, that there is not only a strong disposition to hæmorrhage when the blood-vessels are wounded, but that there is also a tendency as strongly marked to plethora and spontaneous hæmorrhage. They have all of them, and we believe the same to be true of their bleeding predecessors, had frequent hæmorrhage from the nostrils, gums, and particularly from the frænum of the upper lip.

"In all instances slight contusions are followed by extensive ecchymosis, and a great degree of tumefaction. From a slight contusion on one of the knees of Kilburn's surviving son, received eighteen months since, an enormous tumefaction ensued, with rigidity of the joint, from which he is not yet perfectly recovered. The boys, when beginning to walk, have for a number of months perpetual ecchymosis about the nates, from the contusions received from falling on them. The plethoric state of the system which takes place when any considerable time elapses without hæmorrhage, is evidenced by a flushing of the face, a sense of fulness about the head, indisposition to active exertion, and all the usual symptoms of plethora. Their countenances have always a sallow puffed hue, not unlike that which is observable in those who have recently had fevers from the operations of marsh effluvia.

"This sallowness is not absent when the blood-vessels have a plethoric fulness; the face is flushed, exhibiting a complexion strikingly different from the red and white tints of health. When the vessels are drained by hæmorrhage the countenance is sallow and pale in the extreme. We have never witnessed in the male part of the Kilburn branch, any wounds of sufficient size to have the current of blood, in case it was arterial, assume the *per saltum* motion; but the strong impetus with which the blood is discharged, and the powerful resistance which it opposes to all remedies, whether mechanical or of other kinds, in whatever manner applied, would seem to be strong evidence that the blood is arterial. The blood is not destitute of coagulability; large coagula are frequently formed about the orifice of the wounds, but the impetus with which the blood flows overcomes their too feeble resistance. When by any means the hæmorrhage is suppressed, the part above usually becomes distended, livid, and intolerably painful, so that relief is obtained only by permitting a recurrence of the bleeding. Slight wounds have, in some instances, healed by adhesive inflammation. We have not discovered any malformation or unnatural distribution of the blood-vessels generally, nor in the valvular construction of the veins particularly. It has been noticed in the Kilburn boys, and it may exist in all, that they have had during the debility existing after hæmorrhage depraved appetites; one of them was disposed to eat sand, another common earth.

"It will be observed in this report, that all the cases which have occurred, have been in the male line, and it has disclosed itself at an early age, and abating as age advances. This state seems often to fluctuate in the same patient; a scratch at one time threatening fatal loss of blood, at another scarcely attracting attention. In some, distinct periods of remission and exacerbation may be observed. At the latter times the patient is subject to frequent attacks of pain and swelling, with ecchymosis of the wrist, ankles, and knee joint, attended with fever. These symptoms continue about a fortnight, and then disappear, with subsidence of the swelling and removal of the ecchymosis."

This diathesis, then, has many points of resemblance to both the scrofulous and the scorbutic. The most prominent signs are an obvious delicacy of system; usually a fair complexion; a thin transparency of skin; irritability of circulation at all times, conjoined with occasional febrile accessions; a tendency to ecchymosis from the slightest cause, as also to hæmorrhagic oozing from mucous surfaces.

The causes would seem to be twofold; a morbid condition of the blood, and also of the capillaries. In the cases similar to these under consideration, the blood is described as "thin and ichorous, deficient in the due proportion of fibrin, and in the power of coagulation; more especially it is incapable, even when wholly at rest, of forming a dense and firm coagulum." In consequence of such change in the fluid, there ensues an undue tendency to congestion of the capillaries; so that these vessels, when cut, are not only filled with blood incapable of affording the best hemostatic agent —coagulation, but also contain an amount of that fluid greater than normal. The blood itself is probably altered in quality, but the nature of the change is not accurately known. Dissolution of the corpuscles or fibrin, so much insisted on by some writers, is not really present. The corpuscles seem to be deficient in number, and the liquor sanguinis is in excess; but these peculiarities may be the result and not the cause of the hæmorrhage.

The capillaries and minute arterial twigs are also at fault. When examined, the latter seems to be devoid of the middle coat, the former is of a thin and feeble appearance and unusually capacious. It may be that the middle coat is deficient, as some suppose, but more probably it exists, though in a defective state, and certainly impaired in contractility and tone. In conse-

quence, the other component parts of the natural hæmostatics are equally defective as to the power of coagulation. The cut vessel contracts and retracts scarcely, if at all; remaining open and unshrunk, passively pouring out its thin contents. Further, the vascular coats are friable and easily torn. Slight bruises produce serious ecchymosis, coughing may induce hæmoptysis, a sneeze brings on epistaxis, and extravasations in the internal cavities are not unlikely to follow slight causes.

The Treatment necessarily becomes prophylactic, every precaution being taken to prevent any and every solution of continuity. Resembling, as it does, scrofula, the usual tonics adopted in the treatment of that disease will be of service; but perseverance in their use is especially essential. Not being unlike scurvy, in certain of its symptoms, citric acid naturally suggests itself as a remedy, and this he would be inclined to put to a pretty thorough test. Occasionally, brisk purgative doses of sulphate of soda will prove beneficial, in two ways; as a hydragogue, diminishing the amount of serum in the blood, and as a chemical salt, exerting some peculiar power over the blood, compelling its coagulation.

When the crisis of hæmorrhage has occurred, attention should be directed to the improvement of the state of the blood, as well as the condition of the capillaries, with a view to hæmostatic results. We should if possible increase the proportion of fibrin, and as a means the induction of inflammation may be attempted at a distance from the bleeding part. Then again a derivative effect on the source of hæmorrhage is effected only at the expense of time, which in these cases is of course not without value. But the induction of true inflammation, in view of the reaction in store, may be seriously questioned here. Simple irritants and dry cupping, however, are not open to such objections; and therefore may be unhesitatingly employed. For the sake of promoting a state of nausea and depression, as most likely to favor the desired hæmostatic result, abstinence from food and drink may be insisted on. But should our first efforts fail, and the bleeding continue, we may be driven to the use of non-stimulant nutriments in small quantities, as soup, animal jelly, &c., omitting aqueous fluids, as tending to bring about a plethora of thin blood. Wine, brandy, and all other stimulants, unless at the eleventh hour, are not likely to exercise any other than a baneful influence. But possessed as we are of so little power in contributing an increase to the amount of fibrin, we may endeavor to turn that which is already in the system to good account. Subacetate of lead and opium may then be administered in full and sustained doses. In the event of the failure of these last we may fall back upon the sulphate of alum and potass., in doses of fifteen to twenty grains, upon gallic acid in doses of twelve grains frequently repeated, or upon matico in infusion, as the stomach may tolerate. For chemical reasons, the sulphate of soda cannot be given in conjunction with the acetate of lead.

Nauseants not only moderate the heart's action, but plainly favor coagulation of the blood. Ipecacuanha or tartar emetic, in doses short of actual emesis, at the commencement of the case are therefore expedient; for it is then our aim to artificially induce that depression which is analogous to faintness from syncope without the concomitant of loss of blood, which, of course, becomes alarming in an exact ratio to its period of continuance.

A capricious shifting from one remedy to another, in haste and confusion, is to be avoided: the medical attendant is called upon in these cases to persevere in one well selected plan until results have begun to tell.

Our second indication is directed to the state of the vessels. Of internal remedies, opium is likely to exercise a beneficial influence indirectly. In mucous surfaces, turpentine, gallic acid, matico, the fluid nitrate of mercury, and the sulphate of iron, have often proved highly advantageous, and may be employed as local adjuvants to the general means of arrest. For general application, some prefer nitrate of silver, not as a mere styptic to be trusted to alone, but as preliminary and adjuvant to pressure, which is to be considered the principal local means of arrest. The nitrate is used so as to restrain the flow, and permit the apex of a graduated compress to be retained in position by a bandage, etc., to be laid in a dry bed. A great amount of pressure must be carefully avoided, for both part and system are intolerant of this; ecchymosis, sloughing, and ulceration, with much constitutional disturbance of a low and irritable type, will certainly follow, and in a short time blood will burst forth, from a wider surface and with a more willing flow than before.

The actual cautery has naturally been much employed in desperate cases; but the resulting eschar arrests the flow only temporarily, since the process of detachment is, in such cases, both early and rapid, and the ulceration, opening up parts devoid of plastic exudation, opens up a larger surface for a new and more aggravated hæmorrhage. Besides this, the parts are by its use rendered incapable of bearing subsequent application of pressure. Deligation of the principal arterial trunks fails because the oozing is from capillaries.

The operation of transfusion as a last resort should not be delayed until the patient is quite in extremis. The making of an additional wound, which in its turn may assume an indomitable tendency to bleed, is a risk to be appreciated, although experience has shown that such is not invariably the result.

Dr. A. K. Gardner related a case illustrative of the hæmorrhagic diathesis, as manifested in the person of a German lady, who had consulted him about five or six years ago for a deeply jaundiced complexion, accompanied with an almost intolerable itching of the whole body. She had freely availed herself of the benefits reputed to belong to the German Springs, and from thence had repaired to London to test the virtues of a *new* liver specific, Podophyllin! She returned to this city with a recovered complexion, but with little if any mitigation of the itching. It was then noticed that there were certain layers of a yellow formation in the palmar creases, and near the inner canthus of both eyes, which, by competent authority, were thought to be due to the presence of fat. Last June she projected a visit to the White Mountains, and in the course of her journey was seized with an exhausting diarrhœa, *not* cholera. In obedience to a telegram Dr. G. found her in a perfectly powerless condition, coughing out a stringy mucus, with an aphthous tongue, a relaxed uvula, and emaciated to the last degree. In a word, she was suffering from spinal meningitis after the diarrhœa, complicated with other troublesome symptoms. He advised stimulants, a chlorate of potash gargle, and left her in charge of a physician who had come up for a vacation.

She recovered but partially, when she was, not long afterwards, seized with a hæmorrhage from an old, defective tooth, which had been not at all interfered with. Perchloride of iron, matico, nitrate of silver, and collodion, had all proved unavailing. He was not aware, however, that it was an instance of hereditary tendency. The case of a child might also be adduced in further illustration of this diathesis. This little patient, not many hours after birth, exhibited upon its occiput distinct ecchymoses not traceable to any accident or anomaly in labor, these came to implicate other por-

tions of the surface; and the child, who, by the way, was remarkable for an extremely pellucid skin and resembled a wax-doll very much in appearance, finally died at the end of a week.

A third case was that of a child which was seen in consultation, where almost fatal hæmorrhage occurred from lancing the gums. This was arrested by applications of the Liquor Ferri Persulphati, but died after four days from purpura hæmorrhagica, which appeared over various portions of the trunk and limbs.

Dr. Barry, without, of course, attempting to cite the cases as parallel with those of Purpura Hæmorrhagica, had succeeded in arresting the troublesome bleeding sometimes consequent upon the extraction of a tooth, by a cork plug shaped like a cone and armed with a pledget of raw cotton saturated with an astringent solution. He forced this well down into the cavity and had the satisfaction of seeing an effectual arrest of these very troublesome hæmorrhages, after the usual remedies had failed.

Dr. Burke was of the opinion that somehow or other the hæmorrhagic diathesis was associated with a jaundiced complexion. The intolerable itching which accompanies the latter condition was well marked in a patient now under his charge.

The meeting then adjourned.

Correspondence.

EXTRA-UTERINE FŒTATION, AND THE METHOD OF ARRESTING THE ATTENDANT HÆMORRHAGE.

To the Editor of the Medical Record.

Sir—I find that your report of my remarks made at the Pathological, on the occasion of presenting some specimens of extra-uterine fœtation, as published in the Record of the 1st inst., has led some of my obstetric friends into a misapprehension of the object of the treatment there proposed, of the accidents of this abnormal condition. The chirurgical procedure "advocated," was directed exclusively to the saving of the life of the woman from the destructive hæmorrhage following a rupture of the fœtal cyst—an accident uniformly fatal, so far as I know.

It would appear, however, that those remarks, and the proposed treatment, have been accepted by some of your readers as applicable to the management of the extra-uterine fœtus in general—an impression that I desire to correct, by distinctly stating, that no interference with an extra-uterine fœtus was then, nor at any other time, advocated by me; except so far as it might become necessary in the proposed operation for arresting the flow of blood from the torn edges of the ruptured cyst, and in the removal of the effused blood, fluids, etc, from the peritoneal cavity. As I contemplate bringing this matter before the profession in a detailed manner at an early day, I will simply add here, that I then stated, that where all the usual signs of pregnancy have been present during a period of some weeks or months, and are suddenly attended by all the rational signs of hæmorrhage into the peritoneal cavity, it is more than probable that an extra-uterine fœtal cyst has burst, and that blood to a fatal amount is escaping from the torn tissues and vessels. To remove all doubt as to the locality of the effused blood, I further proposed the use of the trocar; and if by its aid the presence of blood in the peritoneal sac be demonstrated, to open freely the cavity of the belly, secure the bleeding pedicle or vessels by ligature, clean out carefully the peritoneal cavity, and close it up.

This operation would naturally include the removal of such portions of the fœtal cyst as would be likely to slough, but should not, in my opinion, include any more.

In the majority of cases, like those I presented to the Society on the occasion alluded to, the ligature would be required to include the fallopian tube on one or on both sides of the cyst, and often the ligament of the ovary; and doubtless all the tissues included and strangulated by these ligatures, would require removal.

In conclusion, I desire to say, that gastrotomy for the removal of an extra-uterine fœtus for any reason, is a subject that I have never proposed to advocate; but when the life of the woman is next to certain to be lost by reason of hæmorrhage from a torn fœtal cyst, I do distinctly propose to make an effort to save it, by ligating the *whole bleeding pedicle*, be it great or small, and at all periods of gestation.

Respectfully,

Stephen Rogers.

No. 232 West Thirty-fourth street.

CASE OF STRYCHNINE POISONING TREATED WITH CAMPHOR AND CHLOROFORM.

To the Editor of the Medical Record.

Sir—I beg leave to report the following case, which I hope may be found of some little interest.

On the 20th of November, 1866, at 12 M., I was requested to see H. F——, a young man residing in this village, who, it was said, had, an hour and a half previously, taken four (4) grains of crystals of strychnine for the purpose of self-destruction.

I found him on the floor of the salesroom of one of our drug-stores lying on his back, and suffering intensely from spasms easily excited upon the lightest touch or motion made in his presence. He was perfectly conscious, and obstinately persisted in refusing to take any remedy which was proposed to avert a fatal termination. Doctors Sweeney and Nichols, who had arrived a few minutes earlier, had made every exertion to induce him to take an emetic, but failed. He had, however, taken a small quantity of camphor and commenced the inhalation of chloroform, which he seemed very willing to continue on account of the relief it gave from suffering. One small dose of camphor was by great exertion taken, but soon the muscles of deglutition became permanently rigid; any further attempt to use internal remedies was utterly useless. For about three hours the chloroform was continued, the spasms for the last half hour gradually gaining in severity, until 3 P.M. One general convulsion came up which seemed likely to end the scene. By dint of hard work he was again rallied, and the chloroform pushed until perfect insensibility was produced, and maintained for some time. On rallying from this, he soon commenced vomiting, and ejected from the stomach a quantity of apple he had eaten directly after taking the poison. After this, he began to exhibit evidence of improvement; the spasms being gradually lessened until 7 P.M. We were able to discontinue the medicine, which had been used almost without intermission for seven hours, consuming 1 lb. of chloroform. At this time a small quantity of urine was passed, the first that had escaped during his illness. And again at 9 P.M., he had another evacuation, which was reserved for subsequent analysis. This, subjected to the usual process of analysis, gave unequivocal evidence of the presence of strychnine. In regard to the agent to which we are indebted for a cure in this case, I think that while great relief from suffering was due, and also vomiting was indirectly due, to the chloroform, we should have failed utterly had not a portion of the poi-

son been ejected from the stomach, and its absorption into the general circulation prevented. The subsequent treatment of the case consisted in the use of anodynes and diuretics—the latter with the hope of hastening the elimination of the poison from the system through the renal secretion.

Yours, etc.,
L. A. HAMILTON.

CHARDON, OHIO, Feb. 17, 1867.

THE OPHTHALMOSCOPE AND CEREBRAL DISEASE.

[TO THE EDITOR OF THE MEDICAL RECORD.]

DEAR SIR—I am happy to find in the number of your valuable journal of Feb. 15, page 565 (Report of the Meeting of the Medical Society of the State of New York), a statement, which probably comes nearer the truth than the speaker intended, to wit:—That amaurotic symptoms, diagnostic of cerebral disease, depend in NO CASE, in reality, upon a plug in a defective tooth.

Familiarity with the use of the ophthalmoscope had convinced some persons of this fact before, but additional testimony is always of value.

Yours truly,
B.

NEW YORK, Feb. 20, 1867.

Medical News and Items.

PERSONAL.

RUSH MEDICAL COLLEGE.—Prof. Gunn, of the Michigan University, has been appointed to the chair rendered vacant in the Rush Medical College by the death of Prof. Brainard.

HARVARD MEDICAL SCHOOL.—Dr. James C. White, the talented junior editor of the *Boston Medical & Surgical Journal*, has retired, in order to accept an adjunct professorship of Medical Chemistry, in the Harvard Medical School.

DEATH OF DR. KELLOG, U. S. N.—DR. KELLOG died suddenly at Montevideo on the 7th instant.

DEATH OF THOMAS K. CHANDLER, U. S. NAVY.—The St. Thomas papers announce the death, on the 5th instant, of Thomas K. Chandler, Acting Passed Assistant Surgeon of the United States Navy on duty with the steamer Penobscot. The deceased was a native of New York, and was appointed to the position he occupied at the time of his death on the 9th of June, 1866, and was assigned to duty with the Penobscot. His death was caused from yellow fever, which disease has been prevalent at St. Thomas for several weeks past.—*N. Y. Herald.*

MEDICAL CONVENTION.—At the meeting of the American Medical Association, held in the city of Baltimore, May 3, 1866, the following resolution was adopted with much unanimity, and the undersigned appointed a Committee to aid in carrying it into practical effect:

Resolved, That this Association earnestly requests the Medical Colleges of the country to hold a convention for the purpose of thoroughly revising the present system of Medical College instruction, and that a Committee be appointed to aid in carrying the resolution into effect.

In fulfilling the duties enjoined on them, the undersigned respectfully and earnestly invite the Trustees and Faculty of each regular Medical College in the United States, to send representatives to a Convention to be held in the city of Cincinnati, Ohio, on Friday preceding the next Annual Meeting of the American Medical Association, namely, on the 3d day of May, 1867. We would also respectfully suggest that all delegates to such Convention be prepared to consider fully and act upon the following subjects:

First. The adoption of a more uniform and just rate of Lecture Fees by all the Colleges in this country. *Second.* The propriety of increasing the length of the Annual Lecture Term, and the number of Professorships. *Third.* The adoption of measures for securing more thorough attention on the part of the students to the more elementary branches of medical science, and a more progressive order of medical studies. *Fourth.* The practicability of requiring three Annual Courses of Lectures, instead of two, as a condition of graduation; and of making Hospital Clinical Instruction a necessary part of the Third Course. *Fifth.* The practicability of establishing and exacting some appropriate standard of preliminary education for young men proposing to enter upon the study of medicine.

Feeling confident that a free interchange of views upon these and such other topics as the Convention might deem proper, would result in the adoption of measures of great importance to the interests, honor, and usefulness of our profession, we again cordially and earnestly invite your coöperation.

N. S. DAVIS,
S. D. GROSS,
WORTHINGTON HOOKER,
M. B. WRIGHT,
GEO. C. SHATTUCK,
} Committee.

URIC ACID FROM PERUVIAN GUANO.—Dr. Lowe heats one part by weight of oil of vitriol in a porcelain dish placed on the water-bath, and adds gradually the same weight of previously dried and powdered guano, constantly stirring with a glass rod. Much carbonic and muriatic gas is evolved, which must be guarded against, the dish being kept on the bath as long as the escape of hydrochloric acid is perceptible; the mess is then diluted with twelve to fifteen times its bulk of distilled water, and after settling, decanted from the insoluble portion, and this is once or twice repeated, the liquor being filtered, and the sediment collected on the filter and washed until nearly free from sulphuric acid; after which, it is boiled in a porcelain dish with dilutic caustic soda, the solution filtered, and precipitated by the addition of a small excess of hydrochloric acid. The crystallized acid is collected on a filter when cold, washed with water, and if necessary, decolorized by heating it for a short time on the water-bath in a porcelain dish with its own weight of oil of vitriol, diluting afterwards very gradually with water, and washing on a filter.—*Druggists' Circular.*

A MEDICAL GOVERNOR.—By the election of Governor Swann, of Maryland, to the United States Senate, Dr. C. C. Cox, the Lieutenant-Governor, succeeds to the office thus vacated.

SPECTRUM ANALYSIS.—Prof. Henry Draper delivered a lecture on the evening of the 19th ult., at the Rutgers Institute, on "Spectrum Analysis," which was illustrated by images thrown on a camera, and illuminated by the magnesium light.

THE AQUATIC ANIMALS OF THE AMAZON, was the subject of an interesting lecture delivered the same evening, by Prof. Agassiz, at the Cooper Institute, under the auspices of the Association for the Advancement of Science and Art.

Death from Chloroform at Bellevue Hospital.—A death from chloroform took place recently at Bellevue Hospital on the occasion of the performance of a rhinoplastic operation by Professor Hamilton. The patient was a robust, middle-aged Irish woman, whose nose had been bitten off in an encounter with a negro. A preliminary operation had been made for the purpose of forming a flap for the new member, and everything had progressed favorably. The second operation was intended to complete the formation of the nose, but before it could be commenced, the patient expired. It seems that chloroform had been first administered by two of the hospital internes with a view of bringing the patient rapidly under the influence of an anæsthetic, and an effort was afterwards made to employ ether, but insensibility not being satisfactorily induced, chloroform was again employed with the desired result, and the anæsthesia afterwards kept up by ether. As the operator was about to commence, the patient was noticed to grow suddenly pale, the pulse ceased at the wrist, and despite every exertion to resuscitate her by means, first, of artificial respiration, then of the galvanic battery, and afterwards by artificial breathing following laryngotomy, the patient expired. The materials were chemically pure, and the usual care was taken in their administration. Death took place as the result of paralysis of the heart.

Eulogy on Prof. Joseph M. Smith.—Dr. W. C. Roberts read a very interesting and eloquent eulogy upon the late lamented Professor Joseph M. Smith, on Wednesday evening, Feb. 6, before the New York Academy of Medicine. The meeting was well attended, and the audience paid the orator the high compliment of the strictest attention.

Legalized Prostitution.—It is stated on reliable authority, that Assemblyman Jacobs's bill for the regulation of prostitution, to which we have already referred, has a fair prospect of becoming a law.

Quarantine.—The Board of Health have adopted a memorial declaring that full and unrestricted authority should be vested in the Commissioners of Quarantine to allow them to obtain a site for quarantine purposes by the power of eminent domain, if it cannot be secured by purchase. The document has been forwarded to the Legislature.

Milk consumed in New York and Vicinity.—The milk consumed in the city of New York and its immediate vicinity, is estimated at an average of three hundred thousand quarts a day.

Death of Dr. W. Brinton.—Dr. William Brinton, F.R.S., the distinguished London physician, died of uræmia on the 17th of January, aged 43 years.

St. Luke's Hospital.—Dr. Charles F. Taylor has been appointed Consulting Orthopœdic Surgeon to this institution.

Ligature of the Right Subclavian and Carotid Arteries.—Professor Joseph C. Hutchison recently ligated simultaneously, the right subclavian in the third portion, and also the right carotid, for aneurism of the arteria innominata. The operation was performed at the Brooklyn City Hospital, and the patient promises to recover. A detailed history of the case will shortly be furnished our readers by the operator.

Prevalence of Criminal Abortion.—But the worst feature of this matter is its increased and increasing prevalence. Formerly it was almost exclusively adopted to get rid of the encumbrance and shame of illicit intercourse; and by the masses of society, especially the moralist, it was considered as the natural result of such carnal indulgence; and only susceptible of control as the higher religious sentiment prevailed, influencing men to self-restraint. Of course, taking the world as we find it, there was little hope of accomplishing much towards the abatement of the evil—and it could only be held in check by operating upon the fears of men, through law. Now, however, the exceeding prevalence of the evil is found to be among an entirely different class, and the fruit of legitimate wedlock in every grade of society, high and low, but especially the former, is the prey of this destroying Moloch. There is reason to fear that in this present age, but few of either sex enter into the marital relation, without full information as to the ways and means of avoiding or destroying the legitimate results of matrimony—in the one case, whether by injections, imperfect intercourse, or the abominable French appliance, conception is prevented; while in the other, by medicinal or mechanical means, they destroy the fruit of conception; for they are often sufficiently instructed to be quite independent of outside helps. Among married persons, so extensive has this practice become, that people of high repute not only commit this crime, but do not even shun to speak boastingly among their intimates, of the deed and the means of accomplishing it. Is there a physician here present, whose experience does not fully confirm the statement? Gracious Heavens! and has it come to this, that in an age of advanced Christianity, with the advantage and refinement which education is supposed to bring, woman, the dearest, best, and purest of God's creation, can descend to this lowest level, and become a murderess, and that too of her own offspring!—D. M. Stewart, *Detroit Rev. Med. and Surgery.*

Production of Sexes at Will.—Dr. Thos. Liscomb (Nashville *Journal of Medicine and Surgery*), with reference to M. Thuny's theory of the production of sexes at will, says: "We believe that the Creator, in infinite wisdom and with that beneficence to the creature man that characterizes all of his dealings with him, has reserved this secret to himself; veiling it in mystery so profound as to cause it to remain for ever hidden from the researches of man. If so, it is doubtless best that it should so remain. Discover this secret to man, and what might he not attempt? He might, in the exercise of his limited capacity, conclude that first one and then another animal was useless in the world; and then, with an amount of zeal worthy of a better cause, commence his work of destruction of that particular species, by so regulating the intercourse of the sexes as to prevent any female offspring being begotten, thus severing link after link in the great chain of animated nature. And the wickedness of man might not stop here, but a serious and grave interference with the propagation of his own species might be attempted and accomplished; as we all know that there is a foolish and wide-spread prejudice with many parents against having daughters born to them; an overweening anxiety for boys, as foolish as it is wicked, as if the great God who regulates these things was not the best judge of what was best for us, and best for the world. And as the unerring word of inspiration has declared that man is desperately wicked, and our own observation and experience abundantly attest the truth of the declaration, what other great wickedness might he not attempt?"

Prof. Rosas of Vienna.—In a lecture published in the *Buffalo Medical and Surgical Journal*, relating to medical affairs abroad, among other interesting facts, it is noted that "Professor Rosas" has an eye clinic in the General Hospital in Vienna. If we are not greatly in error, Professor Rosas has been dead quite a number of years. Professors Arlt, Stellwag, and Jaeger are the living teachers of ophthalmology in Vienna.

Original Communications.

AN OPERATION FOR ABSCESS OF THE APPENDIX VERMIFORMIS CÆCI.

By WILLARD PARKER, M.D.,

PROFESSOR OF PRINCIPLES AND PRACTICE OF SURGERY, COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

FAMILIAR as we are with the diseases to which the alimentary canal is liable, there is one part of it—the appendix vermiformis—the pathology of which is, to a great extent, involved in obscurity. In the ancient literature of the profession we find nothing in regard to it; in fact, we have no reason to suppose that attention was ever directed to it as a part which might be the seat of special disease. And this neglect is not to be wondered at, when we reflect that, by its position, the appendix vermiformis is insignificant; and, by its anatomical similitude with the rest of the intestinal tube, it is impossible for disease affecting it to remain for more than a limited period, local. In many cases, general symptoms too rapidly intervene to allow an exact diagnosis to be made out; and, frequently, it is only at the autopsy that we become acquainted with the precise nature of the disease which has terminated the life of the patient.

During the present century, however, the zeal of the profession, which has been at work, uprooting the hidden things of the past, has not suffered investigation into the obscure physiology and pathology of the appendix, to remain wholly idle. Various papers, by English, French, and German authors, have appeared;* besides occasional cases, which from time to time have found their way into the medical journals. But although much has already been done, much still remains to be accomplished, before the obscurity surrounding this subject will have been entirely removed.

There are, however, three diseases of the appendix vermiformis, which have been classified from post-mortem appearances:

1. Gangrene.
2. Perforating Ulcer.
3. Abscess.

To these, Rokitanski adds a catarrhal affection of the appendix, which may be only the commencement of a graver condition, or which may exist by itself as a distinct disease. By some, these diseases have all been grouped together under the general name, Typhlitis. † They all have the same origin, viz. the impaction of calculous masses in the calibre of the tube, or the presence of foreign substances, such as the seed of fruit, shot, etc. These may become causes of disease, either by obstructing the circulation of the part, or by their presence, simply, they may give rise to irritation and inflammation.

Gangrene, and perforating ulcers of the appendix vermiformis, usually occur in male children, and prove fatal in from two to five or six days. No certain diagnosis can be made out. Violent symptoms of general peritonitis set in, and it is rare that medical interference is of any avail.

Abscess of the appendix, on the contrary, generally attacks those past adult age; is slower in its progress, and presents symptoms more easy to recognise. An attack is ushered in by pain in the bowels, suddenly coming on; loss of appetite; nausea, vomiting, and perhaps some febrile action. In a short time the pain circumscribes itself in the right iliac region; nausea and vomiting continue; the bowels are constipated; skin dry and feverish; pulse inflammatory; tongue thickly coated; abdomen somewhat tumid and resonant on percussion—also sympathetic tenderness over its whole extent. After the lapse of a few days, a small circumscribed tumor may be detected in the neighborhood of the right iliac fossa.

All of the symptoms may not be present in every case, and some of them are common to other diseases. Uncertainty may exist with regard to the diagnosis. It may be difficult to determine whether a case is internal hernia, abscess of the appendix, or intussusception. The greatest diagnostic mark to be remembered, is this: In the above-named diseases (internal hernia and intussusception) there is insuperable obstruction in the bowels, while in abscess of the appendix vermiformis there is no such obstruction. The administration of a cathartic, then, will clear up all obscurity. And it is to be remembered, also, that in abscess of the appendix, the action of a cathartic produces, at first, marked relief of all the symptoms; but this relief is only temporary. Accordingly, then, as a cathartic acts efficiently or not at all, we are able, by exclusion, to arrive at a tolerably certain diagnosis; the more so, as we are aided by the symptoms already enumerated, the pain and circumscribed tenderness over the iliac fossa.

The prognosis is bad. The end is generally death. Dr. Lewis reports* forty-seven cases of diseased appendix, all of which terminated fatally. Death occurs in this way: When the pus has accumulated in sufficient quantity, it forces its way into the cavity of the peritoneum, a violent peritonitis is induced, and death rapidly ensues. All, however, who have abscess of the appendix vermiformis, do not die. In a few cases, adhesions, strong enough to keep the contained pus from invading the peritoneal cavity, are created around the abscess, and the pus finds an exit by ulceration, either into some portion of intestine, generally the cæcum, or through the abdominal wall.

The following cases are illustrative:—

In 1843, I was called in consultation to visit Dr. T., of Brooklyn. He had been confined to bed for some weeks, suffering from pain in the bowels, constipation, disturbance of system, fever, tenderness in right inguinal region, etc. On examination, I found a swelling in the neighborhood of the iliac fossa, in which questionable fluctuation existed. An opening of exploration was made, which justified a free incision. I accordingly cut down into, and excavated the contents of the abscess; with the pus, a little concretion, the size of a raisin-seed, came out. In a short time the patient recovered, and is living now, in good health.

I saw Mr. D., æt. forty-five, a strong, healthy farmer, on the 20th of May, 1865. He had been sick for six days with pain in the bowels, tenderness over right iliac fossa, etc. He was lying on his back, his legs drawn up; his bowels had been freely moved. I prescribed a blister, opium, and nourishment. I next saw

* Husson and Dance, "Sur quelques Engorgements Inflammatoires qui se developpent dans la Fosse Iliaque Droite. Repertoire Général. Tome iv., 1827."

"Des Abcès de la Fosse Iliaque Droit. Leçons Orales de Dupuytren. Tome iii., 1833."

By these observers, abscesses of the right iliac fossa, and the symptoms accompanying them, were described, but they failed to perceive the connexion which these bore to inflammations originating in the appendix vermiformis. They thought that they were all "primarily inflammations of the cellular tissue in the right iliac fossa, which may terminate in resolution, suppuration, or universal peritonitis."

It was reserved for Dr. Burne, "Medico-Chirurgical Transactions," vols. xx. and xxii., to establish the true relations of these abscesses, and trace them back from effect to cause.

† Purchelt, the first German physician who gave particular attention to these conditions, proposed the name perityphlitis.

* New York Journal of Medicine. November, 1856.

him on the 17th of June. He was weak and emaciated from the severity and continuance of the attack. A tumor had appeared over the region of tenderness, which two days previously had grown considerably smaller, and at the same time a liquid, supposed to be purulent, discharge had taken place from the bowels. The tumor was soft to the touch, and presented a point where pus was near the surface: this I laid open with a bistoury, and considerable purulent matter, with gas, made its escape. Following this was improvement and perfect recovery. In this case the abscess had broken, not only through into the intestine, as was shown by the reduction in the size of the tumor, simultaneously with a discharge from the bowels, but ulceration was already commencing to form a track for the escape of the pus through the abdominal walls.

C. J. O., æt. twenty-one, robust, had suffered for two years from dyspepsia and chronic diarrhœa. He stated that, on the 10th of June, 1865, he was attacked with peritonitis, the pain being intensified over the right iliac fossa. On the 16th, the general inflammation having abated, he noticed a swelling, hard to the touch, and very painful, above the right groin. This tumor gradually enlarged, until the 20th of August, when I first saw him. It presented a circumscribed appearance, had a doughy feel, and sometimes crepitated as if it contained gas. Leeches were applied and poultices; the bowels were made to act, and he had got so far well as to be able to attend to his business, though the tumor and hardness had never entirely disappeared; when, in the latter part of November, he had a recurrence of his difficulty. On the 4th of December I made an incision, through which some pus and a small calculus made their escape. On examination the latter was found to consist of uric acid, biliary matter, and some débris of muscular food. On the 16th of January, the tumor in the meantime having disappeared, leaving only an indurated hardness, the patient was again attacked with violent pain, vomiting, etc., as at the first. On the 17th, some enlargement was noticed, and on the 20th (it having attained the size of a man's fist, and fluctuation being discovered), it was opened, and pus copiously discharged therefrom. In a short time the flow of pus had ceased, the parts resuming very nearly their normal condition. He soon returned to his home in Connecticut, where he now is. In a letter dated April 6, 1866, he says that his general health is poor, being troubled with weak bowels and vomiting, but his side has given him no inconvenience since it was last opened.

A fact, which bears somewhat upon the prognosis, is discovered in looking at the anatomical position of the appendix. Its origin is generally from the inferior, posterior, and inner side of the cæcum, and it may be of varying size, and occupy various positions. It may depend into the pelvis and lie over the iliac fossa: it may lie curled up behind the cæcum, on the outer edge of the psoas magnus, upon the fascia iliaca: or it may lie encircling the cæcum and extend up along the colon for four or five inches. By remembering the last position our diagnosis will be aided, rather than the prognosis, for we will be prepared to find the tenderness and circumscribed swelling at a higher point upon the abdomen, than the region over the iliac fossa. When the appendix lies behind the cæcum upon the fascia iliaca, its inflammation and abscess become of less importance, for the peritoneum in this case is not involved, and the direction of the abscess is towards the outer margin of the quadratus lumborum, where the parietes offer but little resistance. These last positions of the appendix, however, are rare, and they are only mentioned as being among the possibilities.

The duration is variable, and depends upon the absence or presence of adhesions. In the first case the patient dies in from two to four or five days. In the second, death cannot occur so long as the adhesions keep the peritoneal cavity intact. These are in danger of being broken as long as the formation of pus is on the increase; that is, until its maximum is reached, which, in all probability, will be by the twelfth day. The adhesions, if they break at all, will have broken by this day, so that we may conclude, if the patient survives the fifth day, Nature is putting her seal of safety upon the case. Death may occur after the twelfth day, but the chances are greatly diminished.

Of the general treatment I have little to say. Absolute rest on the back, opium, and such nourishment as will maintain the plastic integrity of the blood, will be sufficiently indicated to every practitioner.

The matter of local treatment, however, has attracted my attention for many years. These questions presented themselves: Are the efforts of nature exerted in behalf of a cure, and if so, in what way? Observation indicates the reply, and experience verifies its truth. Nature does labor in behalf of life, in two ways: 1st, by means of the wall of false membrane, which she builds up around the abscess; and 2d, by the ulceration, which gives an external vent to the escape of its contents. This being settled, it became a question whether surgery might be able to render assistance to Nature in this work; and if so, at what period would interference best come in?

In what has gone before, it would seem that in some cases no adhesions are formed, and general peritonitis quickly carries the patient to the grave. It is obvious, in these cases, that surgery can be of no avail.

It has likewise been seen that many cases are prolonged beyond the fifth day. In these we have evidence of an adhesive inflammation, and we know that the next step in the progress of the case will be ulceration. The only danger now to be feared is, that before ulceration can fully accomplish its purposes, the pressure of the accumulating pus will break through the recently formed adhesions, and the event will be the same as if no adhesive inflammation had taken place. Just here, if at all, the office of the surgeon becomes necessary; for by making a free incision down to the point where pus is collected, we have a method by which we may supersede nature in its slow process of ulceration. By this means, the pus will escape as soon as it is formed; consequently there will be no pressure upon the recent adhesions, and even though weak, they will be strong enough to answer all the purposes for which they were created. The time for making the incision is a matter of great importance. To be successful, it is necessary that it should be made neither too early nor too late—not before adhesions are fully formed, nor after a short period before the maximum formation of pus has been reached; that is, the incision should be made after the fifth day, and before the twelfth.

Reasoning thus, I had convinced myself of the practicability of an operation, in cases of abscess of the appendix vermiformis. Of its safety there could be no doubt, for there was no danger in the division of those structures through which the incision would pass. That it was perfectly justifiable, I had no doubt, for, taking into consideration the two possibilities of any case, I could find no reason why the operation should not be performed. The first of these, was where the diagnosis had been clearly made out. This has been sufficiently dwelt upon in the foregoing paragraphs. The second, was in those cases in which there was doubt as to the diagnosis. If no abscess had already formed, in case one should be in process of formation, an external

opening would tend to make it point in a safe direction. And even if no abscess should form, a free incision would relieve tension, thus adding to the comfort of the patient, and in no way prejudicing his safety. One other question remained. Would the operation be successful in bringing about a cure? Judging from the result of the three cases reported above, an affirmative answer seemed certain; for these recovered, because in each one nature had provided for an external discharge of the contents of the abscess, and what nature had provided for in these three, an operation would provide for in all cases. These theories received final confirmation in the result of the case, the report of which follows:

J. D., æt. 40, strong, of full habit, was attacked with pain in the bowels at half-past four o'clock in the morning of Friday, January 12, 1866. He has been more or less subject to severe attacks in the bowels for some years. The night preceding the present attack, he had been out with friends and had eaten a late supper. At five A.M. he vomited, and felt some pain in the right iliac fossa. At eight, he took coffee and toast, after which he went down town. During the day he had no appetite, and took no food until evening, when he ate a little cold chicken. There was no movement from the bowels during the day. In the night he had nausea. On the 13th he arose early, having passed a restless night. After breakfast he took two blue-pills. During the day he suffered from pain in the right side, which was relieved by bending over to that side. On the 14th, there being as yet no movement from the bowels, he took a glass of Saratoga Empire water. Pain, restlessness, and nausea still continued. Mustard was applied over the affected side. This evening he had an inefficient movement from the bowels. On the 15th, the above symptoms increased in severity, continued, and in addition he was troubled with eructations. In the evening his family physician, Dr. Sabine, saw him, and ordered opium and a blister to the affected side, also leeches. On the 16th, I saw the patient in consultation with Dr. S. We found him with a thickly coated tongue; no appetite; nausea, and a constipated state of the bowels; pulse inflammatory, ranging over 100; skin dry and feverish; abdomen tumid and resonant on percussion; pain in the whole abdomen, but more decided in the right iliac fossa. Over this was a circumscribed tenderness, the boundaries of which could easily be marked out by the fingers. Micturition painful; pain also extended down the right thigh, and to the right testicle, which was drawn up. He was lying with his right thigh flexed on the pelvis, which position gave him some relief.

The case was diagnosed as probably abscess of the appendix vermiformis. To render it certain, however, that there was no internal hernia, intussusception, or impaction of fæces, and to clear up the diagnosis, we ordered calomel, gr. xv., and opium, gr. iij., to be given in three doses. On the morning of the 17th, ol. ricini ℥j, with tr. opii gtt. xx., were administered, and operated freely, a large quantity of scybalous fæces coming away. The immediate effect was an amelioration of all the symptoms. The pulse became soft, and fell to 80; skin moist; tongue less coated; some return of appetite; abdomen less tumid, and the pain became definitely circumscribed in the right iliac fossa. On the 19th, his symptoms indicated a return of his former condition. During this day he was kept under the influence of opium, and on the 20th, finding his symptoms more unfavorable, his exact condition was explained to him and the operation proposed. It was, with his consent, decided that if on the next day there should be no improvement, it should be performed. On the 21st, there being no change for the better, but if anything for the worse, and it now being the ninth day of the attack, it was decided to operate as soon as practicable. An injection of catnip tea was given, to relieve the bowels of wind, and at half-past two P.M., assisted by Drs. Sabine, Sands, Thomas Sabine, and my pupil, Mr. Wynkoop, I commenced the operation.

An incision six inches in length was made through the integument, commencing above, and about one inch from, the anterior superior spinous process of the ilium, running towards the symphysis pubis. About one inch of the incision was above an imaginary line drawn from one ant. sup. spin. proc. to the other, and five inches below. The incision was continued carefully down, and all the structures found to be healthy, until the fascia transversalis was reached, which was found to be thickened. This was divided over a director, and right beneath a tumor was felt, which was about two inches long and an inch and a half in width. An exploring needle was introduced, when immediately there gushed up some thick, bad-smelling pus. The sac was now freely opened, and about four ounces of pus, in which there may have been a little fæces, discharged. A tent was introduced into the cavity, and the wound left to close up by granulations. The patient rallied well, after the operation, and passed a good night. The next morning he was in a quiet condition; pulse 84, soft; tongue more moist; abdomen soft; but little fever; wind escaping freely from the bowels; wound discharging healthily. The after treatment consisted entirely of rest, opium, and nourishment. Perfect recovery took place in three weeks, and at the date of writing (December, 1866) he is enjoying perfect health.

POLITZER'S METHOD OF TREATMENT

WITH TWO CASES OF ACUTE AURAL CATARRH.

By HENRY L. SHAW, M.D.,

SURGEON TO THE EYE AND EAR INFIRMARY, BOSTON.

The treatment of diseases of the ear by the apparatus of Politzer, in connexion with Roosa's modification of Buttle's inhaler, although much practised, has not received the attention, from the profession generally, to which it is entitled. We are indebted to our friend Dr. Roosa for having first called our attention to the good results following this method of treatment, which have been fully confirmed by our own experience.

The treatment can hardly be said to take the place of the eustachian catheter; yet, in many instances, it will be found an efficient substitute. No objections of importance can be urged against its use. For in its operation it is harmless and unattended with pain; the sensation produced by the introduction of a foreign body into the nostril, being the only unpleasant sensation accompanying its use. The epistaxis which it sometimes causes, is a trifling matter, and is not unfrequently due to the faulty manipulation of the operator. In persons of a hæmorrhagic diathesis, this is liable to take place, even when the utmost care is used. Rupture of the membrana tympani is mentioned as one of the accidents attributable to its use. We can conceive that such an accident might occur. But by regulating the force by which the bag is compressed, we believe it may almost invariably, if not always, be avoided. In a large number of cases treated by us, it has never occurred. As is well known, the amount of force necessary to inflate the ear, varies in different patients. This is also the case with the same patient at different times. Sometimes a very forcible compression of the bag will be required; and perhaps it may be

necessary to repeat the operation several times before we shall be able to perceive with the otoscope the audible click which notes the entrance of air into the tympanic cavity. The patient may be deceived with reference to the click; and until he becomes accustomed to the sensation, it is well to confirm his assertion in the manner above described. Should the click not be heard, we think it is safe to conclude that the tube is closed. Cases are not unfrequently seen where it is impossible to inflate the tympanum early in the treatment. This impossibility often arises from the inflammation and swelling of the mucous membrane adjacent to the mouths of the eustachian tubes. The diagnosis of this trouble is now very much facilitated by the rhinoscope; and under the persistent use of local remedies the tubes can oftentimes be rendered inflatable.

We have not relied upon the use of the bag alone; the inhaler has been used in connexion, in nearly all instances. The sponge has been moistened with Tr. of iodine, a weak solution of nitrate of silver, or any agent which seemed applicable to the case. The introduction of air alone may be of great service, and occasionally, it is sufficient for the cure. Yet it will be found in many instances, that the cure will be hastened by the use of some medicated vapor. That the vapor passes into the tympanum we have demonstrated in the following manner, in the cases of patients with internal otitis, and of those having perforations of the membrana tympani. The external auditory passage having been thoroughly cleansed, a piece of soft paper or cotton soaked with starch, is inserted in the bottom. Iodized air is then forced through the inhaler, when the characteristic iodide of starch will be found.

The following cases are typical of a class very commonly met with. In each instance cited, the improvement of the hearing was rapid and permanent. No more so, however, than is often the case.

March 27.—Miss D. T——, aged 24; strumous temperament. Fair health. During childhood had enlarged tonsils, which were removed. Three years ago, had a slight discharge from the ears, which lasted but a few days. Since that time, has had several attacks of slight deafness of short duration. Present trouble came on suddenly seven weeks ago. Now hears conversation, if very loud, at two feet. Hearing point with watch, left ear, half an inch. External auditory passage and membrana tympani normal. Eustachian tube not inflatable, although she says she herself has been able, until quite recently, to force air in by closing the mouth and nostrils. Right ear, hearing point with watch in contact. Eustachian tube not inflatable. Auditory passage normal. Handle of malleus very prominent. Its connexion with the membrana tympani unusually vascular. Mucous membrane of throat inflamed, but not swollen. Complains of dryness of the fauces.

Treatment: Solution of nitrate of silver, ten grains to the ounce of water, was applied to the tonsils and about the mouths of the eustachian tube. ℞ Tr. iodini, potass. iod., *ā ā.* ʒ ii., Aq. pur. Oii. M. As a gargle four times daily.

April 2.—Solution of nitrate of silver applied to throat. Gargle continued.

April 7.—Throat is better; says her mother's voice sounds more natural. Hearing point with watch as at first visit. Sol. of silver applied to throat. Gargle continued. Ordered Tr. ferri chlor.

April 17.—Within past few days, has had several marked cracks in both ears, followed by improved hearing, lasting for several hours; in one instance nearly all day. Politzer's bag, with the inhaler containing iodine, was used for the first time. The result was an improvement of six in. in the right ear, and four in the left. Conversational hearing power but slightly improved. Treatment continued.

May 2.—The bag has been used several times since last record. There is a gradual improvement. Throat touched. Treatment continued.

May 10.—Hears ordinary conversation at fifteen feet. The watch is heard at twenty-four in. right ear; twenty-one in. left. Is able to perform duties which her defective hearing unfitted her for before. A single vessel noticed at the connexion of the malleus with the membrana tympani. The former is less prominent. Eustachian tubes normal. She was heard from eight months afterwards, and had no return of the trouble.

November 22.—Mr. T. O. X——, aged 30; sanguineous temperament. Six weeks ago, after exposure, was taken with a severe coryza, which in a few days improved, leaving him deaf. The function of the olfactory nerves is seriously affected; is unable to distinguish the most pungent odor. Taste is also affected, but in a less degree. Hearing point with watch, left ear, contact; right, not heard. Conversation, to be understood, has to be very loud and distinct, and within a foot of the ears. He is then aided by watching the motions of the lips. External auditory passages normal. Membrana tympani, right, dull; left, normal. Several large blood-vessels at the connexion with the malleus; mucous membrane of throat and nares inflamed; that portion over the vertebral column, granular. The marked character of the symptoms, together with the impairment of the olfactory and gustatory nerves, led me to ask the attention of my colleagues before adopting any treatment. Iodized air was inflated with the following result: conversation in an ordinary tone, addressed to others, he heard quite well. Point with watch one and a half inches, right ear; left, not noted. Ordered tr. of iodine gargle as in the previous case.

Dec. 1.—Since last record, iodine air has been used several times. Conversational hearing power improved. Has been able to hear the watch at two and a half inches most of the time. Tympanum inflated, and throat touched with the solution of silver. Treatment continued.

Dec. 6.—After inflation, watch is heard at four inches. Throat touched with tr. of iodine. Treatment continued.

Dec. 31.—Converses with but little difficulty. Hears watch at eight inches, both ears. Throat improved. Ordered gargle of red pepper, vinegar, sugar, and water, as a substitute for iodine gargle.

Jan. 25.—Seen twice a week since last report. Hears ordinary conversation at twenty feet; point with watch, twenty-five inches, being about the normal average.

Feb. 15.—Considers his hearing as acute as ever. He is still under treatment for his other troubles, which have improved but slightly.

41 Essex Street, Boston.

Chemists' Certificates.—The *Boston Medical and Surgical Journal*, in alluding to the practice of granting chemical certificates for different injurious articles of commerce, says: It is no defence for the chemist, in this and other instances which might be mentioned, where certificates are given for such or equally injudicious purposes, to urge that he is not accountable for the use which is subsequently made of them. Such a plea of irresponsibility will not be accepted by those who respect chemistry and who fully appreciate the character of such pseudo-scientific labors, and of the parties who use them for such unworthy purposes.

LARYNGOSCOPY.

By J. SOLIS COHEN, M.D.,
OF PHILADELPHIA.

No. VII.

HISTOLOGY OF THE LARYNX.

According to the researches of Luschka, whose *Anatomie des Menschen* is the most elaborate and instructive on this subject which the writer has consulted, we learn that the cartilages of the larynx are composed of true cartilage structure—fibro-cartilage and reticular cartilage. The thyroid, cricoid, and the greater portion of the arytenoid cartilages, are formed of ordinary cartilage, bluish white in color. This form has considerable disposition during the course of time to undergo pathological degeneration. It undergoes earliest the fibrous degeneration, by which it becomes fragile, assumes a yellow color, or becomes spotted with yellow, and grates under the knife. In the so-called granular degeneration it assumes a turbid color, sometimes yellowish, sometimes the color of asbestos. The intercellular substance is filled more or less with larger and smaller dark molecules, and contains distributed through it, isolated larger granular bodies. Sometimes the degeneration is into porous osseous substance, richly supplied with adipose matter, and this occurs so frequently in mature age that R. Columbus (*J. B. Morgagni, Adversaria Anat.* 1, 23) does not hesitate to enumerate the larynx with the osseous system. The ossification occurs most frequently in the cricoid and thyroid cartilages, sometimes occurring earlier in one, at other times in the other. Ségond says that the muscular process is always the starting-point of the ossification; and that next to the influence of age, the amount of exercise influences its degeneration. And he contends that this occurs earlier and in greater extent, among professional vocalists, than among individuals who do not make extraordinary use of their voices.

Less frequently than ossification, we meet with infiltration of carbonate of lime, which is also said to occur in the capsules of the cartilage, as well as its hyaline substance.

The epiglottis, the cartilages of Santorini, of Wrisberg, the sesamoid cartilages, the vocal processes and points of the arytenoids, the colliculus and vocal processes of the thyroid cartilage, are composed of yellow or reticular cartilage. These are liable to calcification rather than ossification.

The thyroid cartilage is ordinarily described as composed of two plates, alæ, or wings, which are joined at the centre. This is not sufficiently exact. It was first pointed out by Rambaud, and subsequently by J. A. Cavasse, Halberstma (Luschka), *et al.*, that there is an intermediate or central cartilage uniting the two wings —the lamina intermedia. This has much the form of an inverted wine-glass with flaring edges, or the large extremity of a trumpet; but occasionally it is rhomboidal in shape. It can be recognised in all ages and in both sexes, and can be readily separated in the unossified larynx after the perichondrium has been fully removed, which can be best done in those which have been immersed for some time in alcohol. A transverse or vertical section will show its existence, and it can be isolated by maceration in a dilute solution of potassa. It is composed of a hyaline cartilage structure, and by its more greyish color can be distinguished from the milky white of the alæ proper. The cartilage of this intermediate portion of the thyroid on its inner surface, receives the anterior vocal processes, to which the true vocal cords are attached. It has been shown by Gerhardt to be composed of reticular cartilage, but it departs from the usual construction of reticular cartilage, inasmuch as instead of the usual thickly matted small, dark, short elastic fibre arrangement, here, paler fibrils, sometimes plaited in bands, cross each other, sometimes horizontally, sometimes curvilinearly, forming interspaces in which large cartilage cells are here and there distributed. This fibrous cartilaginous structure has been found unchanged by Luschka, even when the lamina intermedia had become completely ossified, which circumstance would seem to show that it may maintain some important physiological relation to the true vocal cords.

We have spoken of the yellow color of the vocal processes of the arytenoids. It is demonstrable by the microscope, as was first pointed out by Rheiner, that through the fibrous basement structure of their reticular cartilage, these processes are actually continuous with the fibro-elastic element of the true vocal cords.

The sesamoid cartilages first discovered by Luschka, are only occasionally present. They have been observed in various degrees of development in both sexes, at all ages, and in both feebly and strongly built individuals.

The vocal cords are duplicatures of the elastic vocal membrane of the larynx; and their remarkable susceptibility of vibration is due to a peculiar fibrous band which forms their basement structure. These cords at their extremities are reinforced with reticular cartilage, by which their vibration is secured, and their ossification prevented. Their anterior and posterior extremities are so thoroughly connected with the anterior and posterior vocal processes, that their fibrous structure is inextricably blended into the felt-like elastic element of the vocal cords. In addition to this a large proportion of the fibres of the thyro-arytenoid muscle is so intimately bound up into this duplicature of elastic vocal membrane, and so incorporated into its structure, that it actually forms the largest moiety of the body of the cord.

The question has been started as to the existence of points of difference between the larynx of the negro and that of the Caucasian. Dr. Gibb, calling attention to this subject before the Medical Society of London (see *London Lancet*, June, 1864), after alluding to the greater constancy and size of the cartilages of Wrisberg, in the negro, remarked that also in the negro "the vocal cords, in place of being flat and horizontal as in the white man, were more or less oblique from within outwards, their free border being elevated at a higher angle than their attachment, thus giving them a shelving or slanting direction outwards; the ventricles taking a direction downwards and outwards, so that any small body, such as a bead, placed upon the slanting vocal cord, would roll into the ventricle; while in the white man the ventricle is situated external to, but immediately above the plane of the true vocal cords." The writer has had but a single opportunity to make the post-mortem examination of the larynx of a negro (he means a *black* man, not a mulatto), and the appearances described by Dr. Gibb were not present,—he has in his possession the specimen with a little piece of the black skin of the neck attached; and in a number of examinations made in the dissecting room of the Jefferson Medical College of Philadelphia, by Dr. Taylor, one of the demonstrators, no difference of this kind could be detected. In several laryngoscopic examinations of mulattoes, he could not detect this difference. It may be that his own observations chanced to be upon exceptional cases, or it may be that those of the gentleman quoted were exceptional. At any rate, he is convinced that the difference between the vocal

cords of the negro and Caucasian, if it does exist, is not constant.

There are found in the reticular cartilage of the epiglottis, irregular pits or notches containing follicular and racemose glands. This inlaying with glandular structure gives it a great disposition to ulceration, which, when it occurs, usually results in ulcers irregularly serrated in outline.

The bulging belly of the epiglottis is due in part to an increased thickness of cartilage, but in a greater measure to an accumulation of glandular and adipose tissue.

The perichondrium of the cartilages of the larynx is composed of thick areolar tissue, interspersed with a few irregular elastic fibres. It contains a tolerably rich network of blood-vessels. But few nerves can be traced in it, and, according to Luschka, only as primitive fibres. According to J. Engles, who has minutely investigated the structure of this perichondrium, that of the epiglottis is most richly supplied with nerves, and upon both its surfaces.

PHYSIOLOGY OF THE LARYNX—AND OF VOICE.

The larynx belongs to that class of musical instruments in which the sounds are produced by the vibrations of reeds and tongues. There are instruments with metallic reeds, which are tense in themselves, and thus are readily thrown into vibration by the passage of a current of air; and there are others with membranous tongues (caoutchouc, etc.) which are rendered tense by stretching.

The jewsharp is an instance of a musical instrument with a metallic tongue. In some instruments, as the accordeon and its class, the reed is attached by one border, and the air compressed in its passage into a narrow column, rushes past it on three sides; while in another class, as the organ-pipe, etc., the reed covers a portion of the opening at one end of the instrument. In the class of which the accordeon is the type, the tone is produced solely by the vibration of the tongue started by the concussion of a column of air, and it will vary in character with the length and elasticity of the reed. In the class of which the organ-pipe is the type, the pitch is dependent, in addition, upon the length of the tube, and the coincident vibration of the reed, and of the air within the tube.

The larynx, therefore, may be described as a reed instrument, with two parallel membranous tongues—the true vocal cords; the instrument terminating in a forked exit tube—the mouth and the nares; while for the production of the necessary current and its conveyance into the instrument, we have the lungs as the bellows, and the bronchial tubes and the trachea as the conduits.

In order that sound may be produced, it is necessary that the lips of the glottis should be parallel and closely approximated at right angles to the axis of the tube, so that only a narrow fissure remains between them; and then the air driven against these lips of the glottis during expiration, sets them in vibration as it rushes between them, and is itself also set in vibration, just as occurs when sound is produced in the organ-pipe.

The mechanism of the vocal apparatus has been imitated by Mr. Willets, who constructed an artificial larynx by stretching a piece of thin gutta-percha around one end of a tube, allowing a portion of the rubber to extend beyond the tube; and then stretching still further the free portion of the rubber between two fixed points or projections, so as to produce a narrow elliptical fissure. Then, by blowing into the free portion of the tube a sonorous sound is produced, the pitch of which can be rendered higher by stretching the rubber so as to increase the tension and narrow the fissure; while the free lips of the rubber will be seen to vibrate during the production of the sound.

A strong current of air forced through the excised larynx of a recent subject will produce the vocal tones if the arytenoids are tied together, and the vocal cords forcibly stretched lengthwise; and the intensity and pitch of the vocal tone will vary with the degree of tension and force of the blast.

That the true vocal cords alone are concerned in the production of sound is proved by repeating the experiment of Magendie, of cutting away the epiglottis, the false vocal cords, and the arytenoid cartilages above the points of attachment of the true vocal cords, which can be done without destroying the power of producing vocal tone as long as the true vocal cords are entire, and kept tense so as to narrow sufficiently the chink of the glottis; and the same result is seen in disease, where, by cicatrization or ulceration, the epiglottis and false vocal cords have been destroyed or their functions impaired, as can now be demonstrated during life by the aid of the laryngoscope.

For the production of voice several conditions are necessary.

In the first place, the true vocal cords must approach each other and be parallel so as to cross the current of air horizontally; in ordinary respiration their edges are inclined from each other;—and secondly, the fissure between them must not exceed about a line in breadth. This opening concerns the ligamentous rima, or vocal glottis; the cartilaginous rima must remain completely closed; if the ligamentous rima were completely closed also, there would be no passage for the escape of the respiratory current, and, of course, there could be no production of sound. If the cartilaginous glottis remain open, and the vocal glottis be properly fissured, the air will rush through behind, and there will be no vocal sound. If, however, the vocal glottis be properly fissured, and the anterior portion of the cartilaginous rima closed at the points of attachment of the vocal cords, though it may be open again behind, we will have vocal tone of the same pitch as if it were closed behind also, though at the same time the two will be muffled on account of the escape of a portion of the expiratory current through the cartilaginous glottis. These conditions are occasionally beautifully demonstrated in various varieties of paralysis of the muscular apparatus of the vocal cords.

Then the escaping current of air must strike the glottis with a certain amount of force. If this is prevented by a fistule, or an artificial opening below the position of the true vocal cords, there will be no voice as long as it is allowed to remain open, because the air will escape before it can be propelled against the vocal cords; but as soon as it is closed by the finger, or by the valvular arrangement of a tracheotomy tube arranged for speaking, the voice can be produced. The amount of force with which the vocal cords are struck, can be very well appreciated in an individual with such a fistule below the level of the cords, by placing the finger upon the opening while the patient is speaking, when some of the air will escape at the sides of the finger with a peculiar forcible rush. If, however, this fistule exist above the position of the true vocal cords so that no portion of the air escapes until after it has set them in vibration, the vocal tone will be produced.

Then again, if the chink of the glottis be properly fissured, simple expiration will not accomplish tone; the air must be propelled as it were with some amount of force against the glottis, meeting with a certain resistance to its passage through.

A certain amount of tension must be maintained in

the cords, and according to the increase of tension will be the rise in pitch. If the cords are relaxed, tone can be produced only when the length of the glottis is very much shortened.

For the production of a clear, sonorous tone, there must be no impediment to the vibration of the true vocal cords; and to the inserviance of this purpose the ventricles of the larynx seem adapted, as they secure a space above the cords for their free vibration.

During the production of a proper healthy note, the cords are not alone tense by elongation—they seem stretched in width; at any rate their transverse extent is more prominent to the eye, and they assume a somewhat vaulted form, as though the escaping current of air pressed upwards their central portions. Any pathological alteration which interferes with the free movement of the cords, or which, by affecting their structure, compromises their integrity of function, their elasticity and vibratility, will produce an alteration in the character of the vocal tone.

Injury or division of the laryngeal nerves supplying the muscular apparatus, will produce alteration and destruction of voice.

The alterations in the position and tension of the vocal cords are the principal agents in the alteration of the tone, and are accomplished as follows:—

They are separated by the action of the posterior crico-arytenoid muscles; they are brought in contact by the action of the transverse and oblique fibres of the arytenoid muscles; they are rendered tense, and lengthened by the action of the crico-thyroid muscles; they are stretched transversely and shortened by the action of the thyro-arytenoid muscles; they are slackened and shortened by the action of the lateral crico-arytenoid muscles. These movements can be verified by galvanism upon the recent larynx.

During vocalization we see the true vocal cords vibrate in their entire length; that is, from one vocal process to the other; and we know from anatomical arrangement and subjective sensations, that the thyro-arytenoid muscles vibrate with them, as also the general elastic membrane of the larynx; while in deep, sonorous resonant tones, the trachea and sometimes the entire respiratory apparatus vibrate also. This vibration of trachea, etc., is probably due to the action of the glottis impeding the escape of the strong current of air which reverberates or reacts upon these structures; for it is not likely that these parts have anything to do in the modification of sound.

There are a number of agents which assist in the modification of sound. Thus, drawing the larynx down upon the sternum, by the action of the sterno-thyroid muscles, will deepen the tone; and drawing it upwards under the tongue, by the thyro-hyroid, shortening the length of the main exit tube, will render it higher. These movements can be felt by placing the finger over the larynx externally, and running the scale.

The epiglottis, by depression over the superior aperture of the larynx, will deepen the tone and render it duller, just as placing any covering over the end of any other tubular musical instrument will deaden the sound. The epiglottis doubtless conduces to the production of the pathetical warning tones of the minister, and to the rough, menacing tones of the ruffian; and is produced consentaneously with the lowering of the jaw and depression of the tongue in the production of these deep and hollow tones.

The arches of the palate and the uvula contribute to the modification of the vocal sound, as we well know from examples of congenital or pathological deficiencies; and too extensive an amputation of the uvula for hypertrophy or elongation is said in many instances to have been followed by deterioration in the quality of the musical tone. We sometimes see the arches of the palate vibrate powerfully in the production of the trill, and it would appear in some instances to be the chief agent in the formation of the trill, instead of vibration of the glottis.

In Tobold's latest work, *Die Chronischen Kehlkopfs-Krankheiten*, are given the deductions of a reliable professor of music, as to the modification and timbre of the vocal tones. These are to the effect that the chest-notes are characterized essentially as reed-notes, and the falsetto and head-notes as flute notes; thus confirming the opinion of Petrequin and Diday, arrived at long before Garcia's introduction of the laryngeal mirror as a means of observation.

In the flute instrument, tone is produced by the current of air only, and is modified by the length of the instrument. In the reed instrument, as we have already seen, the tone is produced by the vibration of metallic or membranous laminæ.

It has been a subject of a good deal of controversy, whether the primitive producer of tone in the reed instrument is the tongue itself or the air which is set in vibration. The tongue or reed does not seem to perform a secondary part in the formation of tone, for the strength of the tone will depend upon the nature and continuity of the impulse by which the reed is set in vibration.

That the vocal cords, although being but short membranes, can by their intrinsic vibration produce such full and powerful tones, is dependent upon the extraordinary elasticity of their structure, which it is impossible to imitate artificially.

The function of the vocal cords, in the formation of the chest-notes, can be well likened to that of the lips in blowing the trumpet. The lips are in themselves inelastic; but by voluntary muscular contraction they may be made to imitate membranous tongues. Now, while the lips are thus vibrating voluntarily, and producing tone, if we place opposite them an exit-tube (a horn, trumpet, trombone, etc.), we will not only find the tone become more sonorous, but it will be modified in the most varied manner, according to the mechanism of the exit-tube; and the entire character of tone heard will be due, not only to the mere blowing of air into it, but also to the reed-like oscillation of the lips. In this case the oscillating lips, imitating or acting for the time as membranous reeds, are the primitive medium of the tone; and not the current of air vibrating in the tube, as in the case of the flute.

Consequently, as the tongue or reed in the reed-instrument, and the lips in the blowing-instrument, we must regard the vocal cords as the primary educers of the tone, in the production of the chest-notes.

In the chest-notes the cords vibrate in great extent, and along their entire breadth. In the falsetto and head-notes, we see the glottis only as a more or less open slit, and the vibration is confined to the inner borders of the vocal cords, while the bodies of the cords remain tensely stretched, and do not vibrate at all—the inter-cartilaginous glottis remaining always closed. In the falsetto notes, the vibration of the cords, too, plays but a secondary part; and it is the vibration of the air that strikes them, which is to be principally regarded as the primitive element of tone.

To produce a normally formed tone, the cartilaginous glottis must remain completely closed, and the expiratory current escape through the ligamentous glottis only. In this way the entire escaping current is set in phonal vibration, and the tone will ring out fresh and powerful. But if the cartilaginous glottis be not closed, there streams out a second current which, in its exit,

mixes with the phonal current and renders it dull and veiled, instead of clear and decided, while at the same time more frequent inspiration becomes necessary, on account of the increased expiratory volume.

In the modification of the character of the vocal sound (timbre), the pharynx performs an important part, as by its lengthening, shortening, or contracting, it modifies the shape and length of the exit-tube. We distinguish two essential timbres, between which we have any quantity of gradation. The clear timbre is produced when the soft palate sinks to meet the mounting larynx. If this occurs to too great an extent, a disagreeable squeak is produced instead. When, on the other hand, the larynx sinks, thus lengthening the pharynx, the tone loses in clearness, but gains in roundness and volume, and acquires the dull timbre; and when this movement is pushed to excess, the tone is dampened and rendered rough.

If we compare the two registers, chest-voice and falsetto (the head register being only a higher modification of the falsetto), we find, in the chest-voice, that the phonal glottis appears closed linearly, in its entire breadth: the true vocal cords present a strong resistance to the expiratory current, are set in full vibration, and the modification of tone takes place by expansion and contraction of the lungs. In the falsetto voice, the phonal glottis is lancet-formed, showing an elliptical slit, and the escaping air meets with but a moderate resistance; and the higher falsetto notes occur through successive shortenings of the opening of the glottis from behind forwards.

The soft palate, the epiglottis, the ventricles of the larynx and the false vocal cords, are not directly necessary to the production of a chest, or falsetto note; they merely modify the tone formed in the glottis.

It is therefore clearly demonstrable why a very slight affection of the vocal apparatus may cause an important alteration in the production of sound, or even prevent it. Even a slight congestion and swelling of the true vocal cords will prevent vibration as perfect as that produced when the cords were sound. Swelling of the false vocal cords, especially when filling up the space of the ventricles, will cause them to act upon the true vocal cords as the dampers upon a stringed instrument, and thus prevent the full vibration of the true vocal cords, even when the latter are perfectly sound.

The limits of a journal article, in the present series, preclude as full a discussion of the physiology of voice, with reference to the phenomena of musical tone and mutism, as the writer would have liked to indulge in; and therefore he has but selected from the material at his disposal, such as, being confirmed or suggested by ocular observation upon the living human larynx, most fully expresses the views of recent observers (in this department of physiology, who have availed themselves of the laryngoscope in their investigations); and the greater portion of the present article has been taken bodily from the work of Tobold, previously referred to. It is necessary to have a distinct idea of the mechanism of the vocal apparatus, in the normal performance of its functions, to be able to recognise and appreciate deviations occurring in disease, especially if the attempt is to be made to correct them. The import of this observation will be acknowledged when we study the subjects of aphonia and dysphonia.

But the larynx is also greatly concerned in respiration. The appearance of the glottis, under these circumstances, as seen mirrored in the laryngoscope, is as follows: During ordinary quiet respiration, the glottis remains moderately opened, lozenge-shaped, gently dilating with an inclined movement at each inspiration, and contracting again in the expiratory movement; the arytenoid cartilages being separated. When a forced inspiration is taken, the vocal cords and the arytenoids become separated to their widest extent, and the form of the glottis is changed to a trapezoid; at the same time, the epiglottis becomes more erect and continuous with the anterior wall of the trachea, a position which affords the best view of the conoid ligament where the subject is young enough for it to be recognised, as well as a more extended view down the tube. The extensive motility of these parts can best be observed by taking a deep inspiration, when the view above described will be presented; then following it, by intonation, the glottis closes promptly, the true vocal cords stretch towards each other, and the arytenoids become closely pressed against each other.

The whole mechanism of closure of the larynx, in the act of swallowing, cannot be observed in the laryngoscope, for the simple reason that one cannot swallow with his mouth wide open; but the movements can be induced artificially by going through the preliminary motions of swallowing, retching, etc. Of course, respiration is stopped by complete closure of the glottis from approximation of the true vocal cords; then, as the movement is continued, the false vocal cords become closely applied, and the epiglottis falls promptly, its belly tightly pressed upon the false vocal cords, its free border reaching beyond the arytenoids, and its lingual surface undergoing a linear indentation in the middle line, giving it much the appearance of a double cap to the spout of a molasses jug. Some persons have the facility of controlling these movements, so as to demonstrate the triple action in distinct succession: the closure of the glottis, the apposition of the false vocal cords, and the depression of the epiglottis.

In cases of aphonia from paralysis, the sole factors of this closure are the false vocal cords and the epiglottis; where the epiglottis has been destroyed, the factors are the vocal cords, true and false. In these cases, the combination of muscles, called a sphincter of the larynx in the last article, compresses the false vocal cords and the ary-epiglottic folds, puckering up the laryngeal entrance.

Original Lectures.

LECTURES ON PUERPERAL CONVULSIONS.

DELIVERED IN CHICAGO MEDICAL COLLEGE,

By W. H. BYFORD, A.M., M.D.,

PROF. OF OBSTETRICS, ETC.

LECTURE IV.

Treatment.—The two main indications in treatment are: First, the removal of hyperæmia of the brain and spinal nervous centres; and, second, removal of the uræmia.

To overcome both these morbid conditions is very desirable but sometimes impracticable, yet we can generally entirely get rid of one of them and thus avoid the commencement or continuance of the paroxysms.

The treatment is very properly and naturally divided into the medical and obstetrical.

Although possibly not the most important, it is most convenient to consider the medical treatment first. The application of treatment is modified by the time when instituted; that is, either as preventive or curative. As I have endeavored to show, we may often determine the presence of a predisposition to puerperal convulsions quite conclusively some days, and even weeks, before the supervention of an attack; and not unfrequently, by proper treatment, entirely avoid the development of them.

We will often be able to accomplish *one* of the indications of a cure by preventive measures, viz. to remove hyperæmia of the nervous centres. The means to accomplish this end are bleeding, the administration of cathartics, diaphoretics and diuretics. When the patient is plethoric, with a red injected face, a full and slow pulse, blood-letting should be resorted to. We may bleed the patient until these conditions are removed or very much reduced. I hope I may be allowed to remark that when the predisposition is certainly present, we are justified in using, nay the case demands energetic measures, and that we ought not to be deterred from the employment of them for fear of inducing premature delivery, for really this would add to the chances of both the patient and fœtus. And for fear of being misunderstood by the student, I will repeat the main items diagnostic of the predisposition, viz. œdema of the *upper* part of the body, face, or limbs, or all together, albumen in the urine, and the various nervous symptoms I have mentioned. When to these are added those of decided plethora, an active antiphlogistic medication is generally very beneficial. One decided venesection in the sitting posture, until approaching syncope is observed, will sometimes do much good and entirely avert the attack. But active catharsis is also attended with very satisfactory results. The compound powder of jalap is one of the best of cathartics at such times. It should be administered in sufficiently large doses to cause copious watery evacuations. Should the patient not be decidedly plethoric, we may, with propriety, omit the bleeding, but the cathartic should be given. This should in either case be succeeded by the wine of colchicum in decided doses every four or six hours, and at least once a day the patient should have a steam bath to cause free diaphoresis.

At any stage of this treatment nervous suffering should be promptly relieved by opium. The Dover powder is a good form. Very often such treatment is followed by premature labor, and when such is the case the labor is much less apt to be attended by this dreadful complication. I think this plan is very much more appropriate than an immediate resort to the intentional induction of premature labor without first reducing the cerebral hyperæmia. This cerebral hyperæmia should be held up to us as affording one of the most valuable indications of treatment; very often its removal is sufficient to render a very threatening case safe. The preventive treatment I have recommended is not always followed by premature labor, as this process may not take place at the end of term. Sponge baths of acetic acid, friction with acetic acid, and acid drinks and medicines, may be used with the hope that they may enter the blood and neutralize the ureal accumulations in that fluid.

During a Paroxysm.—The first thing that should be attended to during the paroxysms is to prevent the injury which so frequently results to the tongue. A large cork, or a soft pine stick, should be placed between the molar teeth on one side while the jaws are separated, and thus retained, until the convulsion ceases. We ought not to be betrayed by any excitement into the use of a spoon-handle or other metallic substance, lest damage may be done to the teeth. The clothing should be loosened, so that the neck, body, or limbs, may not be constricted by it. The throat must be made entirely naked when practicable, and we must observe that the violent and irregular movements do not twist the clothing about some part of the person to an injurious degree. The attendants ought not to restrain the movements of the patient too greatly; indeed, perfect freedom to the whole body should be allowed when it does not become clear that it will result in throwing the patient off the bed or bruising her person. It is very harmful, for instance, to take hold of the limbs and try to hold them still. The bed should be large and firm enough to bear the weight of the attendants, if necessary. Plenty of air should be admitted into the room, and the latter should not be too warm. The face may be sprinkled or washed with cold water. I have tried to interrupt the convulsions by dashing the face suddenly with ice-water, but have not seen any effect from it that was desirable.

Inter-paroxysmal Treatment.—It is a matter of the greatest moment to prevent a recurrence of the paroxysms; if this can be done we are almost sure of success. The fewer the convulsions the less the danger, should be an ever present fact with us. It is the frequent repetition of them that produces the fatal effects upon the brain. By the judicious use of chloroform we may prevent them from returning in a great many instances, if not all of them. Dr. Braun, of Vienna, recommends us to give chloroform as soon as there is any sign of a supervening paroxysm, and continue it until sound sleep is induced; but I am sure that to administer in this way we shall fail to get all the good effects from its use that are practicable, for in many instances the premonition is so short we will not prevent the convulsion. The only safe way, and the one I now practice and would strongly recommend, is to keep the patient under its influence all the time sufficient to prevent a manifestation of the premonitory symptoms.

This direction may be followed by sitting by her constantly, and administering the anæsthetic about every ten minutes generally, but sometimes it may be necessary to have a small amount mixed with the air inhaled constantly. The intention is to very much lessen, if not entirely subdue, all reflex excitability, and keep it controlled until the cause of the trouble, uterine pressure, can be removed. The effect of the chloroform is to remove, or rather to subdue, the explosive excitability of the nervous centres caused by the circulation through them of the urea, carbonate of ammonia, or whatever other exciting stimulant has resulted from the retention of substances that ought to have been excreted by the kidneys. It is not likely that the chloroform chemically neutralizes the poison in the blood, but that it renders it inoperative by producing a more powerful but antagonistic influence upon the brain and medulla. It is not at all directly curative, it only suspends the action of the mischievous agent until curative means may be made effective in removing the pathological conditions upon which the convulsions depend. And I must insist, in *all* cases of uræmic puerperal convulsions, where there is enough excitability to keep reproducing the paroxysms, chloroform is applicable and demanded, whether attended with a uræmic, paralytic, or even apoplectic state of the brain and spinal cord or not. It is precisely to control this morbid excitability of the nervous system that it is used; and although I have been governed by this principle for several years, I have never seen any unpleasant effects from its use in convulsions. And whenever I had cause to regret anything of my management of this most excellent remedy, it was that I had been too sparing with it, that I had not kept my patient sufficiently under its influence. It would hardly seem necessary to say that it is entirely useless during a paroxysm, except in very rare instances, in which respiration continues, because it cannot be inhaled as respiration is suspended, and that it is injurious immediately after the paroxysms, while the face is livid with carbonated blood. We wait until the face loses this asphyxiated appearance, and the blood is again charged with its usual amount of oxygen. As soon as this state is brought about we give

the chloroform continually, and maintain an anæsthetic condition that will keep the patient entirely free from the convulsions. She should never be allowed to come out of this state until delivered, if this can be done by any allowable means, even should it require twenty-four, thirty-six, or forty-eight hours. After she is delivered she may be treated generally without further use of chloroform, but if the convulsions recur we should resort to it at once, and keep it up until renal and intestinal secretion is fairly established. Keeping the patient thus constantly anæsthetized beyond the convulsion point, we ought to institute curative measures with as much energy and activity as possible.

Blood-letting is one of the first things to be thought of. The intention in using it is to reduce or remove the cerebral hyperæmia, by lessening the amount of blood and reducing the arterial and cardiac *vis à tergo*. To effect this we must take a large quantity compared to the amount for other conditions of the system. From twenty to forty ounces will be required in one or two operations. The pulse must be affected by it. Sometimes a convulsive paroxysm occurs while the patient is bleeding; this ought to be prevented by chloroform. I have several times bled patients under the influence of chloroform. The anæsthesia should be slight during the bleeding, but sufficient to prevent the paroxysms, and the patient must be more closely watched. She should be supported in a sitting posture while the blood is running, and as soon as the pulse becomes decidedly quicker, we should lay her down and stop the blood, and if necessary repeat it when reaction has resulted. One copious or two moderate bleedings is allowable almost always, and in very plethoric patients two or more copious bleedings. Those old worthies in the profession, Gooch, Armstrong, and others of like stamp, cured many cases of puerperal convulsions by powerful depletory treatment alone. Gooch thought bleeding *the* remedy. As I have endeavored to show, the apoplectic congestion of the brain is an important item, although not, as was supposed by the older authors, the only item. It is probably of secondary importance, but its removal goes a great way towards a cure. I insist that bleeding is one of the very best curative measures, and should be considered in all cases. At the same time that we bleed, or if we do not think best to institute blood-letting, we may, with great propriety, administer an active cathartic. And in doing so we are to remember that promptness is a necessary quality; for the longer the bleeding is delayed, and the longer the cathartic is in operating, the more valuable time is lost.

If we can procure copious and early catharsis without pain, we make a very favorable impression. The medicine I have used most, and still continue to recommend, is croton oil. I usually administer one drop in an emulsion every hour until it operates thoroughly, which, if good, it will do after two or three doses. This treatment will seldom fail to very much modify the severity of the symptoms, and in very many instances completely arrest the convulsions. I know that before the days of chloroform, at a time when the pathology of these cases was not as well understood as now, twenty-five to thirty years ago, many were cured by this treatment; and I am cognizant of two cases in which the convulsions were arrested, and delivery did not take place in one until three and the other five weeks afterwards, each patient carrying a dead child that long, and being delivered without interference or further convulsions. We then bled in both arms in a full stream until there was a close approach to syncope, and sometimes twice, and even thrice, in the same case, and gave the croton oil cathartic at the time we bled. And with all deference and respect for those who have learned to do better without than with bleeding, I must assure the profession that such success as attended our efforts then would not put them to the blush now. I am afraid that the tendency now is to magnify to an undue extent the effects of uræmia, and depreciate the importance of cerebral hyperæmia. And in saying this I feel assured that a proper estimate of uræmia will make it a very dangerous element of the disease, while I think I but express the conviction of the most judicious and thinking portion of the profession, when I say that we have no remedy for it that acts with anything like the promptitude that those do which prove effective in the cerebral congestion. That we may very much modify if not relieve, the latter, in a few hours, nay minutes, while the uræmia cannot be remedied in less than *one or two days*. After proper depletion, or with it, cold to the head, ice in bladders, or india-rubber bags, will aid in the same thing, reducing cerebral congestion; and opium administered in sedative doses may so affect the nervous centres as to materially lessen their violence, it operates somewhat in the same manner that chloroform does by diminishing the excitability of these organs. It does not exert any direct curative power, it only holds the convulsions in abeyance until the uræmia and hyperæmia are removed. Acids undoubtedly act beneficially by attacking the irritating compound circulating in the blood. We must not expect too much from them, however. Acetic and citric acid drinks, vinegar baths, acid compresses over the abdominal surface, back, etc., should be resorted to as much as in the nature of the case is practicable. Then we should resort to diuretics and hydragogues of a particular character. Colchicum, or its preparations, is a powerful diuretic, and has the reputation of inciting the kidneys to the secretion of urea. When given in large doses it proves a hydragogue cathartic and emetic. A teaspoonful of the vinous tincture every hour, until perceptible effects result, and then continued in such doses as the patient can bear without great irritation in the alimentary canal, is the usual mode of using it here. Other diuretics would probably be useful.

A very important part of the treatment is obstetrical. If the views above expressed are true, so long as the uterus maintains its extreme size, the pressure on the large vessels, and the vessels and substance of the kidneys, is continued, the evil working cause is kept up; and while the subsidence of that organ in the pelvis and the consequent relief to the tension of the abdominal muscles, takes off some of this pressure, and sometimes this extends the critical period, if it does not entirely arrest it; yet, it is not generally sufficient. And the patient is not usually safe until it is emptied.

The obstetrical treatment will vary somewhat, owing to the time when the convulsions occur. During pregnancy, any time before term, premature labor is apt to supervene as the effect of the convulsions or the condition of the system upon which they depend. And should this be the case it may be accelerated by means which I shall presently indicate; but if there are no signs of labor, the treatment should be wholly medical, and may be conducted as I have directed above. If labor has commenced and dilatation is slow and difficult, we should dilate the os by artificial means. The only one I have ever resorted to is the finger. By placing one or two fingers in the mouth of the uterus and gently but constantly keeping up pressure upon it from within outwards, we will very much shorten the stage of dilatation. The effort to dilate should not be abated during pain, nor in the intervals, but a constant fatiguing pressure made. So soon as the os is dilated to two inches in diameter, we ought to rupture the membranes

and allow the liquor amnii to flow out. This will generally add energy to the contractions and somewhat lessen the size of the uterus. We should not desist from dilatation until the head has emerged from the cervix entirely. If the head is not readily expelled, we must apply the forceps and assist by judicious traction. If labor proceeds, however, with reasonable activity, and we can succeed in controlling the convulsions, we must abstain from operative procedure entirely. An indispensable condition in all cases where it is necessary to accelerate delivery by any means whatever, is to keep the patient deeply under the influence of chloroform, so much as is necessary to preclude the danger of additional irritation thus caused, bringing convulsions. To dilate, rupture the membranes, and use the forceps, should be the extent of our interference, unless when the feet, knees, or breech presents. Where either of these parts can be seized, we may aid very materially by traction upon it. Craniotomy is not justifiable until we can demonstrate the death of the fœtus, unless indicated by circumstances independent of the uræmia, such as disparity of size between the head and pelvis, ineffectual efforts with the forceps, etc., etc. Neither are we to think of turning. In fact, we must do no more than is absolutely necessary, and do that in such a way as to cause the least possible irritation, and be sure to use chloroform liberally. I say that I have never used anything but my fingers to dilate the uterus, but there is a variety of very efficient means used for this purpose. The compressed sponge is one of the means very efficient, quite handy and available. Dr. Barnes's dilators are also very eligible and efficient. These consist of gum elastic air bags of different sizes. The smallest should be introduced into the cervix empty, by means of the probe, and then inflated through a tube attached to it; in an hour this may be replaced by the next larger, and so on until the mouth is fully dilated. If the compressed sponge is used, a piece large enough to pass easily into the cavity of the cervix may be introduced, and in three hours a larger one if necessary, and so on until the process is completed.

Convulsions commencing after labor is finished, necessitate an examination of the uterine globe externally and internally, by introducing the finger into its mouth to see that the organ is well contracted, and there are no imprisoned clots that are causing irritation. If contraction is not good and blood coagula accumulate, we may use friction above the pubes and give ergot enough to secure the desired effect. Depletion, cathartics, diuretics and opium, with chloroform, are to constitute the treatment, as in the other condition above mentioned.

Progress of Medical Science.

ACCIDENTAL AND CONGENITAL ATRESIA OF THE VAGINA; THE MODE OF OPERATING FOR SUCCESSFULLY ESTABLISHING THE CANAL.—Dr. Thos. Addis Emmet, Surgeon of Woman's Hospital, New York, communicates an article to the *Richmond Medical Journal*, from which we extract the following:—After a review of the literature on this subject, we learn that the result of surgical interference for the permanent relief of accidental occlusion—a consequence of inflammatory action—is favorable in proportion to the extent of the vaginal tract involved, and that the risk of inflammation, as a sequence, is generally in the same ratio. We find, moreover, but few congenital cases recorded, where the canal has remained permanent after an operation, and from the frequent occurrence of pelvic inflammation or peritonitis resulting, the operation for an artificial vagina is now universally regarded as one of a very grave character. It is my belief that, could we learn the after history of the cases recorded, success would prove an exception to the rule. For it has been my experience, without an exception, that the operation has eventually failed where the parts have been divided by means of the knife, in spite of every effort to keep the surfaces separated by bougies, or any other means which would be resorted to for the purpose. Unless some portion of the mucous membrane has remained intact at the upper part of the canal, the plug will be gradually expelled by adhesion of the surfaces from above downwards, until the original condition is attained. When merely a section of the canal has been divided, the required diameter can be preserved so long as a bougie is retained, but after discontinuing its use, the incised tissue will gradually contract, until the false passage becomes obliterated, or reduced to a mere sinus. As a result of a large experience in operating for vesico- and recto-vaginal fistulæ, I became impressed with the fact that in the preparatory operations, when it was necessary to divide extensive bands of adhesions before the edges could be approximated, inflammation rarely followed a division by scissors, or laceration by means of the fingers. In addition, it was observed, that with less hæmorrhage, the vaginal tissue, when divided by scissors or lacerated, had not the same tendency to contract during the process of healing as when separated by means of a clean cut. I became so fully impressed with these facts, that I have for several years entirely discarded the use of the knife in all operations about the female pelvis, wherever it is possible to do so. I am aware that the impression generally received is in opposition to this experience, that the risk of inflammation, and I may add of pyæmia, is lessened by the laceration of the tissues; but a large number of the profession have witnessed the practical results in the hospital, and its records will bear me out in the assertion.

A NEW APPARATUS FOR MAKING EXTENSION AT THE ANKLE-JOINT.—Dr. Julien S. Sherman, of Chicago, describes an improved apparatus for making extension at the ankle-joint. In order to construct it properly, a cast of the patient's leg, from the knee to the ankle, should be taken in plaster of Paris. It is not necessary to include the foot. A piece of sole leather should then be soaked in water, until perfectly soft and pliable, and then moulded and firmly tied upon the cast. It should remain in this condition until thoroughly dry, when it will be found to form a strong socket, *exactly* corresponding to the shape of the leg from which the cast was taken. A steel sole is then cut, the shape of the bottom of the foot being somewhat narrower beneath the instep and heel. From this, and riveted to its under surface, rises, on either side, a steel rod, bent to the shape of the limb; upon its upper two-thirds a screw is cut. This rod is received into a tube, which is attached to the socket. The screw carries a nut, by which the extension is regulated. The rod is braced to the sole by an additional strip of steel on either side. The socket is lined with buckskin and provided with eyelets and lacers. Padding is not necessary, as it corresponds so accurately to the limb that the pressure is easily tolerated. A layer of *sponge rubber* is placed upon the sole, which gives an elastic surface to strap the foot upon, and one which will not *pack or become hard*, as is the case with most substances used for this purpose. The apparatus is applied by first adjusting and lacing the socket; the rods are next inserted in the tubes, and the steel sole brought up against the bottom of the foot; adhesive straps, an inch in width and sufficiently long to pass around the foot and heel, are next

applied, so as to bind them firmly down to the sole; extension is then made, by turning the nuts upon the rods. By this means, all pressure upon the inflamed surfaces will be overcome, and the deformity of "talipes equinus," so frequent in diseases of this joint, prevented, and the best possible condition for recovery obtained. In walking, the patient bears all his weight in the socket, relieving entirely the ankle-joint.

Singular Parasite.—Dr. Ernst Schmidt exhibited to the Chicago Medical Society a specimen of a very unusual parasitic worm, with the following history:—An American girl, ten years of age, weakly, and of scrofulous diathesis, had suffered for some time from capricious appetite and pain in the upper portion of the abdomen. Two weeks ago she complained of pain on the left shoulder; at the seat of pain there soon appeared a slight elevation, tender to the touch, slightly red, from which, in a short time, a small worm was observed, endeavoring to escape. If disturbed, the worm withdrew its head beneath the skin; by gentle pressure, however, it was forced through the small opening it had made. A similar swelling appeared behind the left ear, from which another worm made its escape. Thus far, eight elevations have appeared in different portions of the body, from which five worms have been secured. Some of these elevations were neither red nor very tender on pressure. Palpation gave the sensation of a foreign body under the skin. The efforts of the worms to pass through the skin caused no pain or hæmorrhage. The small opening closed readily, and the elevation soon subsided. The child, during this time, was nervous and irritable, the pulse being, at times, as low as 40 per minute. The application of mercurial ointment caused the elevations to disappear. In all cases where this was applied, the worms seemed to pass upwards from their original position towards the head. The child was not in the habit of eating either raw meat or vegetables. There were no indications of other parasitic worms in the child or other members of the family. The worms were about five-eighths of an inch in length, quite transparent, and divided into eight sections, with an alimentary canal running nearly straight from the anterior to the posterior extremity. The mouth, as examined with the microscope, presented no evidences of apparatus for suction or boring.—*Chicago Medical Journal.*

Extirpation of the Uterus.—Dr. T. Wood, Surgeon to the Commercial Hospital of Cincinnati, reports in the *Cincinnati Lancet and Observer*, a very interesting case of extirpation of the uterus. The patient was a widow, 28 years of age, who was admitted into the Commercial Hospital October 1, 1866. Her abdomen was enlarged about the size of the sixth month of pregnancy; the tumor was hard and smooth, and occupied the median position of the body; was only slightly movable; she had a constant leucorrhœal discharge from vagina, and frequent attacks of pain of a lancinating character, with painful micturition and great difficulty in procuring a passage from the bowels. Had always been a healthy woman; is stated to have aborted at seven months, seven years ago; three years ago she had a severe attack of rheumatism, and immediately upon the subsidence of acute symptoms of this disease, a small tumor made its appearance and has been steadily increasing in magnitude until it has attained its present size. The diagnosis being fibrous tumor of the uterus, its removal by abdominal section was resolved upon, and she was put upon tonics and a regulated diet.

On the 31st of October, she being in good general health, the operation was performed in the following manner: After being placed under the influence of chloroform, an incision was made over the most prominent portion of the tumor, and directly in the median line of the body—extending from the umbilicus to within an inch of the pubes. This cut was rapidly deepened; the fascia, and finally the peritoneum, divided upon the director, when the glistening and smooth surface of the tumor was exposed; it was entirely free from adhesions, and after some slight traction escaped through the opening; was pyriform in shape, and attached in the median line by a comparatively slender pedicle. After tying an artery and a large vein which passed up at the posterior portion of the tumor, and applying ligatures to the ovarian arteries of each side, two double ligatures were then passed through the pedicle by means of needles, and firmly tied; the tumor was then removed by a few strokes of the scalpel; hæmorrhage was very slight, not over ʒ ii. having been lost during the entire operation; there was no protrusion of the bowels, they being easily retained in position by cloths wrung out of warm water. After the removal of the tumor, the pedicle was returned into the abdominal cavity, the ligatures being collected and brought out at the lower end of the cut. After careful sponging, the oozing of blood having entirely ceased, the lips of the wound were brought together, and retained by means of silver pins and twisted suture. The wound was then dressed with cloths wrung out of cold water, and she was removed to her bed. The case did well until the latter part of January (precise date not given), when death took place. This, to the best of our belief, makes the twenty-sixth fatal case out of thirty-three operations performed.

On the Use of Sulphite of Soda in the Treatment of Erysipelas.—Dr. Addinell Hewson stated that he had been using the solution of sulphite of soda as a local application in erysipelas since February, 1864, and had obtained results from it, in the various forms of that disease, which were to him both interesting and surprising. He had been induced to try it from the representation made by Prof. Polli of its influence in destroying all diseases of a cryptogamic or animalcular origin—a source to which recent researches would lead us to suppose erysipelas was due. At first he administered it internally, in doses of ten grains every two hours, as well as applied it locally; but the effects of the local use were so prompt and decided that he has now abandoned its internal administration altogether. In extensive trials of this remedy, both in hospital and private practice, he has never seen it fail when thoroughly applied before the deep planes of cellular tissue had been invaded by the disease. Under the latter circumstance, no positive curative results were of course to be expected from its mere external use. But before such parts had become affected, a solution of ten grains of this salt to the ounce of water, when thoroughly applied on lint all over the surface affected, and to a considerable distance beyond it, and covered with oiled silk to prevent the evaporation of the solution, had not only produced a decided bleaching effect on the discolored surface in every such instance in the first twenty-four hours of its use, but had invariably destroyed all traces of the disease in forty-eight hours from its first application. The result was the same, whether the application was made in the traumatic or idiopathic form of the disease. He had thus cured twenty-seven cases, seven of which were of idiopathic erysipelas. Even in the cases where the deep planes of cellular tissue were involved as well as the surface, the disease on the surface was always apparently affected by the application. It was most positively bleached in all instances, and in many was evidently destroyed, within the period above stated, even whilst that in the deeper parts proceeded on steadily to suppuration.—*Trans. Coll. of Phys. of Philadelphia.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, March 15, 1867.

THE SOCIAL CRIME AS AFFECTING OUR NATIVE POPULATION.

So prevalent is the belief that criminal abortion is extensively practised, that arguments are unnecessary to further establish it. During many years past the subject has claimed the attention of medical men in every country; resolutions condemnatory of the crime have been passed by medical bodies everywhere; papers almost without number have been written upon it; legislation, religion, morality, and physical well-being, have all been in turn appealed to; but all efforts to arrest its progress have not only been futile, but worse than this, we have undeniable assurances that it is on the increase. Formerly the crime was confined principally to those who were the victims of illicit intercourse, and who, maddened by the fear of exposure and its consequences, were ready to resort to any measure, however desperate. Now, however, wives and mothers are added to the list, and are better versed in the abominable art than their erring but certainly not more culpable sisters. We do not propose to remark upon the general subject of abortion, as it has long since been worn threadbare; in fact, we should consider ourselves as having no excuse to allude to its general prevalence and increase, were it not that some new facts have lately transpired which invest it with no little interest These facts are of the utmost importance as bearing upon the question of increase in population, and are also of special concern to us in reference perhaps to the propagation of our native stock. We shall not pretend to show the direct relation between the prevalence and increase of abortion, and the effect which it has upon the comparative decrease of native-born Americans, but shall simply present the facts of the case, and give our readers an opportunity to judge for themselves.

We are thus far enabled to see the results of an examination of this question only in a single State, that of Massachusetts; but judging from the care with which the several conclusions have been arrived at, they should certainly have no inconsiderable weight. The census returns of that State prove that the increase for the last twenty years in the number of inhabitants has been in accordance with a given ratio. This is certainly well enough, as far as it goes; but the investigations of DR. NATHAN ALLEN, of Lowell, tend strongly, if not conclusively, to prove that this increase is made at the expense of a natural growth of our native population. This gentleman has given considerable attention to the subject, and makes some rather startling statements bearing upon it. He maintains that the increase of inhabitants of that Commonwealth during the past twenty or thirty years, has been confined principally to those localities where mechanical, manufacturing, and commercial business has been carried on, the purely agricultural districts being more or less stationary in population. But this increase has been found to be made up largely of the foreign element, either from immigration or by the greater number of births. "It is a fact," says he, "that the foreign class will have on an average about three times as many children as the American. On the other hand, if we take the counties or towns where there has been but little increase of population, we find that they are made up mostly of American stock. In fact, a careful analysis of the census reports of different periods shows that this increase in population in the State follows almost invariably in the same line and in the same proportion as the foreign element has been introduced or increased." That this would seem directly traceable to the number of births exceeding those of deaths, the majority of the former being due to the foreign element, he asserts as the result of a careful examination of the Registration report, that the counties containing the least foreign population now return more deaths than births; while in those cities and towns having the greatest foreign population, the reverse is true.

Acknowledging the difficulty in discriminating, in the Registration reports, between the deaths of Americans and foreigners, since all those born in this country are counted as natives, he believes that this can be in a great measure surmounted by a careful examination of the books of the undertakers, superintendents of burials, and city clerks, and has proved this to be so by such a perusal of the mortuary documents of the cities of Lowell and Lawrence. In order to throw out all objections against the force of the Registration reports for 1864–5, which were made during the period of the war, he goes back to a period considerably antecedent, and proves that for a long time there has been a relative decrease of births with the Americans. This is the language of the report:—"In the colonial census of 1765, taken one hundred years ago, when the population was purely American, the total inhabitants were then two hundred and twenty-two thousand five hundred and sixty-three, and the number under sixteen years of age returned as one hundred and two thousand four hundred and eighty-nine—almost one-half of the whole population. Now it is estimated that only about one-third of our population is under fifteen years of age. Accord-

ing to this estimate, a careful analysis of the natural proportion of the children to each class will show that scarcely one-fifth of the Americans are at the present time under sixteen years of age. This makes a surprising difference in the relative number of children of the same people at the two periods, 1765 and 1865."

For the purpose of showing that there has been a progressive decline in the number of births among Americans during successive periods, he has chosen to refer to the records of some towns which have been kept over a period of two hundred years, and have been carefully examined in reference to determining the relative numbers of children of the different generations. "It was found," he remarks, "that the families comprising the first generation had, on an average, between eight and ten children; the next three generations averaged between seven and eight to each family; the fifth generation about five, and the sixth less than three to each family." This is a most striking falling off of births, which cannot reasonably be explained on the score of a physical degeneration of our race. There are, it is true, influences at work which did not exist when our grandmothers and great-grandmothers were alive; the advance of civilization and the consequent thirst for indulgence in luxuries have certainly left their mark upon the female race of the present day, and have in the aggregate lowered their standard of vitality; but despite all this, we cannot be made to believe that this can even begin to account for the discrepancy. A candid examination of the circumstances of the case will not leave us long in ignorance of the primary cause. The one cause which we are forced to accept, and which, alas! there is too good reason to believe is the only true one, is a settled determination on the part of large numbers of the married to have no children, or at least a very limited number. When we couple this conviction with the fact set forth by the labors of Dr. Allen, that the native stock has a marked tendency to decrease, at whose doors can the blame be for the most part laid? We hardly know which to deplore the most—the growing tendency to lessen the numbers of a noble race, or the depravity which invites the sacrifice! "What a change," says our statistician, "as to the families since those olden times! Then, large families were common—now the exception; then it was rare to find married persons having only one, two, or three children; now it is very common! Then it was regarded a calamity for a married couple to have no children; now such calamities are found on every side of us—in fact they are fashionable!"

If this be so with other States, and we seriously suspect it, a very melancholy and painful fact is brought to light. We have no means at present of determining the relations of native new-born with those of foreign extraction in our own State; one thing at least is certain, and that is, that the aggregate number of births has, by the census of 1865, been shown to be disproportionately small. Sixty-six out of every one hundred families in the City and State of New York have either no children at all, or but one or two. The lesson which we have thus far learned is one that is of immense importance, and should stimulate a searching inquiry into the condition of every State in the Union. Such an investigation has already been set on foot by Dr. Hough, who has the superintendence of the census of the Empire State, and there is a good promise of something substantial being done; others in like positions should do the same, and the results of their common labors in this particular direction may soon settle a point of the greatest moment to every commonwealth in our land.

The sessions of the Medical Colleges have closed for the season; the usual number of addresses and benedictions have been pronounced; and the young medical man, with diploma in hand, has been politely courtesied out upon the cold and uncharitable world. He has been told that his profession is an honorable one, and that nothing but success awaits him. While we hope he will appreciate the true force of the former, we think it our duty to undeceive the too credulous one in regard to the latter. A distinguished professor is in the habit of advising his pupils to study well the cases which may present themselves in the early part of a professional career, and at the same time of remarking that they will have an abundance of time so to do. This gives a clue to the real chances which any young medical man has of at once getting into a lucrative practice. Between him and success lie many obstacles, and much time; and in order to get over them, it is well that he should understand what to expect. Disappointment at the start has been the lot of the most brilliant men we have among us, and no extra talent which the young doctor may deem himself possessed of, is likely to change the rule. Practice will always come after a while, but only after a while; and every one who desires to do credit to himself, to his calling, and to his patrons, should at the very outset of his career

"Learn to labor and to wait."

He who does otherwise, and starts in a different way, and gets, by some seemingly lucky chance, into a business at once, not only does not deserve it, but will never, in the end, be a really successful practitioner. He can never get time to study as he should; he begets a careless habit of prescribing; his knowledge is always deficient, and he never rises above mediocrity. Let this thought comfort the young physician during the first year or two of his practice.

The appointment of Prof. Benjamin Pierce, of Harvard University, to succeed the late Prof. Bache as Superintendent of the Coast Survey, is a good one, and will be hailed with satisfaction by the majority of the scientific men of the country, to whom his superior attainments and his fitness for the position are well known.

We are greatly pained to see the use made of the name of one of our esteemed Brooklyn physicians, which we find in the "*Daily Eagle*" of that city of a late date. There is an account of more than two columns, headed "A Medical Phenomenon, a young lady of this city lives eighteen months without food; wonderful exercise of clairvoyant power. * * Extract from the diary of her physician." The reporter states that "the lengthened prostration of the patient, her remarkable functional derangement and peculiar powers, induces the medical attendant to allow the added indorsement of his medical name and reputation." Then follows the name and address of the physician, who is said to be "of no inconsiderable reputation." We hope that the reporter has presumed too much in publishing this *quasi* advertisement, and that the medical gentleman in question will promptly disavow any such use of his name as is here made. The case is worthy a scientific notice, in a medical journal, where it would do some good. As it is, now, it can only satisfy a morbid curiosity and give an unenviable notoriety to the physician in charge. This disgusting system of advertising, if allowed by our profession, will soon degrade us to the level of the quacks, who regularly occupy columns of our daily press.

Reviews.

THE BRAIN AND CRANIAL NERVES, SHOWING THEIR ORIGIN AND ARRANGEMENT. A Chart. By THOMAS S. BUTMER, Undergraduate in Medicine, Toronto University, Canada. 425 Wellington Street, Montreal, Canada.

THE compiler of this chart, whose industry we commend, has well achieved the object had in view of speaking to the eye, and, through that medium, of more profoundly impressing the memory. It will constitute a very useful piece of furniture for the lecture-room, and would not be out of place in the offices of those desirous of keeping bright their anatomical lore.

MEDICAL RECOLLECTIONS OF THE ARMY OF THE POTOMAC. By JONATHAN LETTERMAN, M.D., late Surgeon U. S. Army, and Medical Director of the Army of the Potomac. New York: D. Appleton & Co., 1866. Pp. 194.

SURGEON LETTERMAN, who will long be held in grateful remembrance for his administrative ability as medical director of the "dear old Army of the Potomac," amid all its strangely chequered fortunes, has succeeded in giving a very interesting, not to say fascinating book. He writes in a perspicuous, elegant style, and we venture to assert that but few who open his volume of medical annals, pregnant as they are with instruction, will care to do otherwise than finish them at a sitting. To old campaigners the tribute will be indeed welcome; while the "intelligent people," to whom he appeals in his preface, cannot fail to appreciate the labors of that most necessary adjunct to a well appointed army—an intelligent, and therefore efficient medical department.

AN INTRODUCTION TO PRACTICAL CHEMISTRY, INCLUDING ANALYSIS; by JOHN E. BOWMAN, F.C.S., late Prof. of Practical Chemistry in King's College, London. Edited by CHARLES L. BLOXAM, F.C.S., Prof. of Practical Chemistry in King's College, London, etc., etc. With one hundred and seven illustrations. Fourth American, from fifth Revised London Edition. Philadelphia: H. C. Lea, 1866, 12mo., pp. 351.

THIS work does not pretend to be more than it really is, an introduction to practical chemistry. It is concise, all theoretical questions are avoided, and is just what is specially needed by the student who wishes to work satisfactorily in the laboratory. The symbols and equations which were given in the previous editions have been omitted, the editor wisely concluding that a much better plan for the student would be to frame them for himself. The chapter on mouth blow-pipe analysis has been much improved, in fact rewritten, which is virtually the case with that portion treating of examinations of unknown substances with the blow-pipe. Besides this, the several metallic and non-metallic bodies have, for convenience of consultation, been arranged alphabetically, and, altogether, give us a very fair dictionary of blow-pipe tests. The reactions of metals have been rearranged, and are much more convenient for study than in the former editions, their claims being considered in the same order in which they are separated from a solution, and not in the inverted order as heretofore. Qualitative analysis receives its share of consideration, and the tables introduced into the appendix for the rapid analysis of simple substances, will be found of great value to the beginner. The illustrations are good, and give a fair insight into the different methods of manipulation, a proper understanding of which makes the study of chemistry so attractive, intelligible, and fascinating. It is an invaluable work for the student, and will serve to form for him the best groundwork for future studies in this particularly useful department of science.

THE PHYSICIAN'S DAILY POCKET RECORD, COMPRISING A VISITING LIST, DIARY, AND DAY-BOOK OF ACCOUNTS; RECORDS OF OBSTETRIC PRACTICE; VACCINATIONS, DEATHS; SPECIAL MEMORANDA, ETC., ETC. Also a List of New Remedies; a Classified List of Medicines, their doses and marked value. Poisons and their Antidotes; Medicinal Weights and Measures. Fee-tables, etc., etc. By S. W. BUTLER, M.D. Philadelphia: Published at the office of the *Medical and Surgical Reporter*, 115 South Seventh street, 1867.

THE aim of Dr. Butler has been to make this a convenient and serviceable record for his professional brethren, and he has, in our opinion, succeeded in so doing. The work is small, got up in handsome pocket-book style, is compact, and the divisions have been made by one who has had ample opportunity for learning the wants of practitioners. The list of new remedies has evidently been prepared with great care, which may also be said to be the case with the doses of those medicines in common use. The poisons and their antidotes are treated in a very convenient tabulated form, and can be consulted satisfactorily in almost any emergency. The table of fees which he has introduced, is an important and interesting feature, and will no doubt commend itself, with slight exceptions, to general adoption. Although calculated for thirty-five patients daily, it can be made to serve for more by simply turning the leaf and writing on the next page, the writer not being hindered from so doing by each day of the week having a date. This plan is a wise one, as the physician can commence his book at any time of the year, and write in the date for himself as occasion may require. Facing each visiting list is a page for daily memoranda, the use of which every physician can well appreciate, as well as the index in the latter part of the work. The obstetric record is the most complete we have seen in a work of the sort; and with care in filling out, it can be made to serve as a reliable statistical account of that department of practice. Altogether, it is an admirable little work, and reflects credit upon the enterprise of the author.

Reports of Societies.

NEW YORK MEDICAL JOURNAL ASSOCIATION.

STATED REUNION, JAN. 25, 1867.

DR. ISAAC E. TAYLOR, in the Chair.

THE VALUE OF SYME'S AMPUTATION AT THE ANKLE-JOINT IN THE ADAPTATION OF AN ARTIFICIAL FOOT.

DR. E. D. HUDSON, according to previous arrangement, remarked upon the above subject. He said: No amputation of the inferior extremity can ever compare, in its value to the subject, with that of the ankle-joint originated by Mr. Syme. Twelve years of experience with that variety of operation have afforded me assurance that it is "a fact complete," not capable of being improved in its general character. It is scientific, practically of the utmost use, and subservient to the best interests and happiness of the patient.

Mr. Fergusson avowed that he "knew of no kind or style of amputation which deserved more high consideration; and so far as the subject is concerned, it is one of the greatest improvements in modern surgery." No other operation has resulted so beneficially and satisfactorily. The subjects of such an amputation scarcely realize their loss, with legitimate appliance. They appear every way whole. The sensations of the stump are normal; the articular surface and thickened tissues are accustomed to the hardest service, and to bear the heaviest burdens, which, with apparatus, enables the patient to engage in his accustomed walks and vocations with unabated naturalness and endurance. One gentleman, for whom he had applied a foot, had walked thirty-five miles in a day, on a hunting excursion, while his companions did not suspect that he was otherwise than whole. So beneficent have been the results of this operation, as to have induced many a sufferer from congenital malformations, varieties of talipes, and troublesome Chopart operations, to demand it as an "amputation of convenience."

He claimed that as an operation it had for its support the soundest principle of surgical economy, since it retains, in addition to the entire length of leg, nature's foundation,—the articular portion of the shaft of a long bone,—as a base of support.

Again, its accustomed service is concurrent and coequal with that of the calcaneum, to sustain the weight and forces of the body which are reflected to it. So also to remove the calcaneum, and to substitute the articular base of the tibia, is merely a change of place, not of functions.

A cogent reason in support of amputation of the ankle-joint is, that to the compacted hardened tissue of the lower termination of the tibia are transferred and united, for a cushion, the thickened tissues which have effectually served to protect the os calcis.

The place of those tissues is changed; their accustomed function is unchanged and normal.

When the change of base and healthy union of the hard and soft parts are successfully perfected, the same condition and serviceableness of the end of the stump is gained as that of the natural heel. After a very short period of exercise the sensations become perfectly natural, and the end of the stump as enduring as the heel of the natural foot.

He had been led to a very great interest and persistent advocacy of Mr. Syme's method, by a regard for the humane principles of rational conservatism, and by the numerous cases of ankle-joint amputations which had demonstrated to him the superior utility of that operation to any amputation of the leg, or any modification of the general one of Mr. Syme. Of fifty recent cases which had come to his hands for final treatment by mechanical means, not one had failed of a highly gratifying success. Both patients and surgeons who have witnessed their results, have been every way pleased with their exceeding benefit. Not every subject is in immediate condition for the adaptation of apparatus, for reasons that will readily be apparent to every surgeon.

Some require treatment for ulcerations, thickened tissues, swellings, and tenderness; others require some inuring treatment, before the application of apparatus. In no instance did he venture to apply apparatus until the patient could endure the end of the stump upon either the bare floor or some unyielding support with ease.

Those leg-makers who have only stereotyped apparatus to apply indiscriminately for amputations in the continuity of the leg, and who find this new method incompatible with their highest ideas, had, to his personal knowledge, treated such cases by apparatus, as for amputation. This allows no weight at the end of the stump, but distributes it upon the walls of the leg, beneath the head of the tibia, and up around the thigh.

Those who have no discriminating knowledge of surgical operations, nor of physiological, anatomical, and pathological principles, can hardly be expected to appreciate and sustain an amputation of the ankle-joint; nor can they treat it legitimately with apparatus which fulfils the design of such an operation.

To illustrate: Captain ——, who had suffered an amputation of the ankle-joint—Syme method—came to this city and applied to —— —— for apparatus. He was informed that, because of a slight prickling sensation when he rested his stump on the floor, it should not receive any weight at its end. An artificial leg was applied, as in ordinary cases of leg amputation, to take the weight of the body upon its walls and the thigh, so as to suspend and relieve the end of the stump. The captain entertained the plea of tenderness as valid; but being very greatly annoyed by the weight and irritation of the apparatus, he sent for a surgeon of this city, who, upon examining the stump and appliance, immediately transferred him to Dr. H. He found his stump admirably well formed and healthy, except a little prickling sensation, which hard pressure induced.

After ten days of preliminary treatment, during which a casement and foot were fitted, and trials made, the prickling had entirely subsided, the natural sensation of the heel was restored, and the patient went out walking without inconvenience.

The sensation of prickling is no unusual complaint for persons to make who have suffered an injury of the tissues of the heel or foot, when they have so far recovered as to begin to exercise the part. It is a mere temporary sensation, which exercise soon converts into a normal one. The objections to Syme's operation, tenderness, unsoundness, and unreliableness as a basis of support, after the stump has become well healed, are entirely gratuitous.

The practice of Mr. Syme (original method) to exsect the indurated tissue, the most depending and most serviceable feature of the tibia, thereby exposing the cancellated structure, and also to remove the malleoli through their base on a level with its articular surface, is unphilosophical and inexpedient. The increased vascularity of the cancelli must necessarily conduce to protract the tenderness of the face of the stump. Some surgeons strive to enlarge the base of support afforded by the tibio-tarsal surface, by sawing the malleoli off,

at a line transverse with the end of the tibia; but the practice is entirely gratuitous, and in some respects prejudicial.

The inter-malleolar space is the only true and all-sufficient base of support; any additional surface is superfluous and increasing the periphery of the end renders it unduly large for the adaptation of symmetrical apparatus. The articular surface should not be molested. The malleoli should be exsected with the saw, at a bevelling angle of some forty degrees. The most serviceable and best proportioned stump is thus composed. With the dense ivory structure, the cancellated and medullary tissues all preserved, other matters being equal, we may rationally anticipate the best results. The modified variety of Baudens, the dorsal flap, or that of Roux, lateral flap, will never be chosen varieties, but adopted as a *dernier ressort* only. Even when the operation is thus modified, the stump is eminently superior for utility, and the entire pressure upon its face, to any amputation of the leg.

He had had two cases of the bilateral-flaps variety, made for want of plantar tissue, and cicatrized over the end of the stump, and one of the dorsal variety, upon each of which the patients bore their entire weight, on an artificial foot, with the utmost comfort.

The compensative apparatus, he had been the first to originate and apply in the United States; nor was he aware of any like legitimate treatment abroad.

With it he had invariably made the face of the stump the basis of entire support, and with no intervening substance, other than one or two thicknesses of soft flannel cloth. The apparatus is composed of a light semi-cylindrical wooden case for the leg, receiving the bulbous end of the stump in a concavity, at its lower end, fitted snugly to the posterior half of the parietes of the stump and leg for two-thirds of its length, while its base is entirely supported. Wide leather bands lace up over the anterior half of the leg, to keep it in situ.

The case is strengthened with strong hickory pins, so dovetailed as to prevent its splitting or yielding to the weight of the body. To the leg and stump-case an artificial foot, of natural size and shape, is attached by a strong ginglymus ankle-joint, on a line nearly parallel with that of its mate. An artificial Tendo-Achillis passes up from the heel, through an inclosed groove into the calf of the casement, where it is strongly inserted. It preserves the foot at a right angle with the leg part, when the weight of the body passes over and forward upon the ball and toe-piece of the foot. The latter is made to hug the ground, the same as the toes of the natural foot, by a strong lever and rubber spring. When the heel strikes the ground, the anterior part of the foot is depressed, but elevated sufficiently by rubber flexor springs, when the weight is off, to prevent tripping. The apparatus is covered with green rawhide, dried and contracted on, and coated with a neat flesh-colored enamel. It may be dressed with stocking, shoe, or boot, at pleasure, the same as its fellow.

With its application the patient is, to all appearance and for usefulness, restored to a normal condition.

The great and important feature of the Syme operation at the ankle-joint, he would repeat, is the natural, philosophical basis of support which the method retains, and the opportunity it affords, by a sufficient shortness, for the adaptation of a compensating artificial foot, and a ginglymus ankle-joint in a proper place.

The main and defensive feature of M. Pirigoff's modification is the increased length of stump, created by the excision of the tibia and calcaneum, and the annexation of a greater or less portion of the latter to the former, for the service of the "*poor man*," with the application of a "bucket" or "boot."

Every physiological anatomist must readily perceive that the increased length of the stump, by an adventitious portion of the os-calcis, will, in the ratio of its increased length, necessarily impair it for the application of legitimate mechanical appliance.

Statistics furnish abundant evidence that it possesses no superior advantage as relates to mortality, sloughings, necrosis, or other untoward events, over the Syme method; *nor even as a reliable basis of support;* only to secure the benefits of an *os-peg-leg*—the similitude of the wooden relic of barbarity.

The special interests of the subject, of an amputation of the inferior extremity, are the matters of importance —"and how the patient may *most fitly* use the rest of his life, by walking on an artificial leg." No artificial leg has been, or can be constructed and adapted to any stump of the leg, having its parietes for support, with such perfect favor, as that which he originated and adapts for ankle-joint amputations. The same apparatus, modified, may be applied to the Pirigoff modification, but the result is far less satisfactory.

There is one condition of the ankle-joint in which the Pirigoff method may be adopted to the very great benefit of the patient, viz. Where caries, necrosis, or injury of the tarsal end of the tibia, precludes the possibility of the Syme method, and would render the Pirigoff method a valuable alternative to an amputation of the leg at its lower third. In any such event, to excise the diseased tibia, and a sufficient amount of the calcaneum, and annex to the tibia to compensate its loss by excision, would be an additional fact to surgical improvement—a worthy expedient—but only as an alternative to the leg amputation. It would make the leg of normal length, and alike serviceable as a Syme case for the adaptation of a befitting apparatus.

Dr. H. condemned the indifference of those surgeons who operated without reference to the adaptability of the stump for the most comfortable contrivances, and gave the instance of a lady now wearing a clumsy apparatus upon whom the surgeon performed an amputation at the upper instead of the lower third, because she was then a poor girl and could afford only a "*peg-leg.*"

After a few remarks by Dr. Hamilton in continuation, the Association adjourned.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, March 6, 1867.

DR. ALFRED C. POST, President, in the Chair.

DR. ANDERSON delivered to the Academy several volumes, transmitted to him as its late President. Among these was a copy of the Transactions of the Montpelier (France) Academy of Medicine.

DR. UNDERHILL moved that the latter institution be placed upon the exchange list of the Academy, and that the present donation be accepted, with thanks.—(Carried.)

DR. ANDERSON also reported, that in accordance with the wish of the Publication Committee, a sufficient number of Dr. Post's Eulogy upon the late Dr. Valentine Mott had been furnished to the different medical schools of the city, for distribution to the graduates of the season, of which courteous acknowledgments had been returned.

SPECIMENS OF AMERICAN ANTIQUITIES.

DR. JOHN C. DRAPER presented to the notice of the Academy a specimen of common salt, nearly chemically pure, which was discovered by the insurgents of the late war upon the *Petit Anse* island, near Vermilion Bay, Louisiana. The deposit was found some fifteen

feet below the surface, and appears at that depth to be pretty generally distributed over the island, which is some five thousand acres in extent. Upon the surface of this deposit were found the bones of the American elephant, and beneath both was discovered a neatly woven mat, composed of the common Southern cane (*Arundinaria macrospermum*). The original of the photograph now exhibited by him was presented by J. F. Clues, Esq., to the Smithsonian Institution, Washington, and is in a state of excellent preservation, owing to both the strongly silicious character of the cane itself and to the properties of the soil from which it had been removed.

This specimen was of interest, as throwing some light upon the antiquity of man; it at least proved that he existed previous to the period to which the skeleton of the elephant in question belonged.

The Academy then adjourned.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

CONVERSATIONAL MEETING, JAN. 9, 1867.

PRESIDENT, DR. WM. MAYBURRY, IN THE CHAIR.

DISCUSSION ON DYSTOCIA.

DR. WM. B. ATKINSON opened the discussion by reading a paper, of which we give the following abstract:

Under the head of difficult labor may properly be considered all cases where, from any cause, the delivery is retarded or rendered dangerous. These may be of two classes:—preventable and unavoidable. The patient may neglect the evacuations, and delay ensue from a distended bladder or rectum. The physician may not be in attendance sufficiently early to rectify a malposition which could have been corrected if detected in time. External manipulation would be here indicated and valuable.

The unavoidable cases are much more numerous and varied. The os uteri may delay by its obstinacy, or the pelvic outlet be almost completely excluded by a variety of causes. The duty of the accoucheur is to be vigilant and neglect no precautions. The bladder and rectum should be emptied; neglect in this particular may induce paralysis or rupture of these organs, fistula, rupture of the uterus, etc. Cases of delay were cited as illustrative of this point.

Where the os uteri does not yield readily, we may bleed, nauseate, use belladonna to the parts, but above all, employ anæsthetics.

Opiates, etc., may be employed when the labor is tedious, thus quieting the contractions and giving time for the circular fibres to dilate. These are contra-indicated in full labor. Perhaps nothing is of so much value as anæsthesia to incomplete insensibility. Eutocia by this means should always be obtained when no objective symptoms are present. Tincture of gelsemin has been recommended to procure painless and speedy dilatation of the uterine mouth. Great benefit may be derived from the aid to dilatation afforded by the finger of the obstetrician hooked in the anterior lip, with gentle and firm traction made forwards and downwards; this prevents the cap or sling forming over the fœtal head, thus acting as a cause of delay, and also rectifies these malpositions of the os so frequently productive of tedious labor, the result of so-called obliquity of the uterus. On this point much might be said, and many cases were quoted to prove the value of this procedure.

The membranes should not be ruptured too early, lest we thus produce tedious labor, nor should they be allowed to remain too long intact. On both these points the speaker descanted at some length to enforce his views, and show the importance of attention to these particulars.

When, after the evacuation of the amniotic fluid, the pains cease, or occur at long intervals, they may be renewed by sweeping the finger around within the os at frequent intervals.

The decubitus of the patient often causes a change in the pains and retards or accelerates delivery. A change from the side to the back, or the opposite side, will frequently improve the contractions, and cause the head to come down more rapidly.

In slow dilatation of the os it is suggested to divide to a limited extent a portion of the circular fibres, and it is claimed that the operation is very frequently successful and very serviceable. Objected to as dangerous and rendering the patient liable to rupture of the uterus. The same has been done with the perineum. Both are strongly advocated by high authority, but are of doubtful propriety. These points ought to elicit free discussion as important if safe, highly dangerous unless experience has taught otherwise.

When are ergot or the forceps to be employed? The former is indicated when the os is freely dilated or easy of dilation, when no obstacles but want of pains interfere to delay the delivery. If the patient is exhausted, combine it with stimulants. The speaker had never met with any bad results from the employment of this remedy. He preferred the fluid-extract as more convenient, and more suitable, for a variety of reasons.

Finally, the forceps come in play as an efficient aid. Here, the physician requires judgment and patience to determine how early they should be employed. They should be regarded as aids for the benefit of the mother or child, and not for the convenience of the doctor. When the delivery is delayed by exhaustion, *inertia uteri*, or failure of the pains from any cause; when further delay is dangerous, and there are fears for the life of either the mother or child; for these, and other or similar cogent reasons, we may employ this instrument. He did not regard their use as fraught with the danger attributed to them by many. He rather felt that many of the fistulæ, etc., attributed to their employment, were the effects of pressure from the child's head, rather than pressure or other action of the forceps.

Some remarks followed on other obstetric operations. Craniotomy, etc., the gimlet craniotome of Dr. Harlow was eulogized as the most perfect and safe instrument for the purpose yet devised.

In conclusion, allusion was made to the general conduct of the obstetrician, his art requiring skill, gentleness and firmness; and yielding an ample reward when properly followed.

DR. HAMILTON remarked that one important point in reference to facilitating the passage of the child's head had not been alluded to in the paper of Dr. Atkinson; that is, to act on the lower portion of the vagina—introducing one or two fingers between the head of the child and the wall of the vagina, and, at the moment of a pain coming on, to press firmly, letting the fingers perform this office on the perineum in the direction of the anus. It seems to have some effect on the passage of the child's head, as it descends and presses in that direction, the motion takes place rapidly.

With regard to the period at which the membranes should be broken, he was undecided. He has sometimes ruptured very tough membranes when the child's head followed rapidly; under other circumstances, this interference was followed by no advantage, and sometimes it was absolutely disadvantageous from loss of the wedge-like bag. As to forceps, he ac-

knowledged their value, but feared they were instruments of great abuse.

Dr. Hatfield requested some remarks from Dr. Harlow as to the advantages of his instrument to which the reader of the paper had referred;

And Dr. Harlow, first speaking of the subject-matter of the paper, believed that we may avoid extremes in using the forceps. His rule is, to be governed by considerations of safety to the mother and to the child, regarding not only their lives, but their well-being also. If by delay we compromise the well-being of either in any way, we are guilty in not using the forceps; if, on the other hand, we use them for our own convenience, and thus compromise either, we are guilty; it must not be used as a time-saving instrument.

With regard to his instrument for entering the fœtal head, he believed it to be the best of the kind which can be used. It has been noticed by Prof. Hodge, who says that it may be used for breaking up the face, and the base of the skull. It is also mentioned in Braithwaite that it may be used where the ossification is greater than usual and other instruments cannot be employed readily. It is not to be employed except when absolutely necessary. He was led to its invention by having a case of contracted pelvis where he was obliged to operate on two or three occasions; the diameter of the superior strait was not more than two inches and a half; he had introduced Meigs' perforator, and found that after inserting it into the skull, he could not insert the forceps that accompany Meigs' perforator. On his way home he contrived this instrument. It consists of an olive-shaped, gimlet-like screw, enlarging rapidly from its point to its broad base; the edges of the screw are entirely smooth, and on entering the parts, there is no probability of wounding the mother. It has no sharp edge as has Smellie's scissors, and other instruments. It not only perforates the skull, but enlarges the opening sufficiently for all the purposes that are desired in craniotomy. After turning, followed by inability to deliver, it can be readily used to break up the base of the skull.

Dr. Washington F. Atlee, alluding to the like and dislike of the forceps, etc., remarked that it requires a mechanical mind to use the forceps justly for the benefit of the mother and the child; otherwise it may be injurious in the hands of those who abuse it. In a great many patients, the existence of the axis of the pelvis is lost sight of in the use of the forceps, and therefore the application of the forceps is difficult in the hands of such practitioners, when it would be perfectly easy in the hands of others. He prefers Siebold's forceps because he has long been accustomed to their use, and in an extensive range of applications, has always been able to employ them. Many physicians condemn the use of the forceps from want of mechanical skill in their application. They don't throw the handles back. There is no position of the head in the pelvis in which the forceps cannot be applied; the higher the head of the child is in the pelvis, the further back must you press the handles, sometimes even to pressing the perineum and rectum backwards to the os coccyx. Dr. Atlee prefers forceps short in the handles. He believes compression to a certain extent will not injure—and almost every case is attended with some compression—the very pressure on the handles will do this; but with short-handled forceps, with the pivot in front, it is impossible to do injury, especially with long blades, by any amount of compression which the hands can make upon the head.

There is an occlusion sometimes of the os uteri, where labor will continue for days without progress, in which by pressing the sharpened finger-nail against the circular fibres and scratching through at the time the pain is on, you perforate the closed tissues, and immediately there is a sudden expansion of the whole os uteri, and the child is born in a few minutes.

Another cause of dystocia is an excess of waters, where the head of the child blocks up the pelvis even after the purse of waters has been broken previously. A large amount of waters will have the same effect as a second child. The uterine efforts cannot be well expended on the body of the child if a large body of waters is around it, even though the purse may have been broken below the head; the head is sometimes so impacted in the superior strait that the labor is delayed by the large quantity of water above the superior strait; then pushing up forcibly the head of the child and sustaining it in this position until the waters are drawn off, will facilitate the labor. Again, in breech presentations, we find the life of the child sacrificed, especially in first labors, by the head being retained with pressure of the head against the umbilical cord, pressing it against the superior strait. Traction of the body, and turning up the body so as to follow the curve of the pelvis, sometimes fails in delivering the head; the finger in the mouth sometimes fails to deliver in time, particularly in first children; in such cases the speaker strongly recommended and always practised, pressure externally; in every foot or breech presentation he calls the nurse to the bedside and tells her to place her hands immediately over the lower part of the abdomen, and to follow his motions by strong pressure, and almost instantaneously the head is forced right out, and the child saved. This is not a procedure recommended by authors generally, but is a practice well worth following.

With regard to the instrument of Dr. Harlow, he related a case proving its value. The head had been perforated, but the brain had not been discharged; the operation had been performed with the ordinary scissors, but the incision was a linear one, and the pressure of the head in coming through the superior strait forced the bones together and kept the brain within. By making a crucial incision, delivery was effected. The instrument of Dr. Harlow would obviate this difficulty.

Dr. Andrew Nebinger mentioned several interesting cases of labor where manual dexterity assisted mechanically without resort to instruments. He exhibited the cranioclast of Prof. Simpson, designed, after removal of the contents of the cranium, to break up the bones of the skull, leaving them in contact with the scalp. The head collapsing is forced down into the cavity of the pelvis and removed by traction, with the same instrument. He referred to the statements of Dr. Tyler Smith, who says that there is no necessity for craniotomy under any circumstances, and he induces premature labor at seven or eight months.

Dr. Spooner desired to add his testimony to that of Dr. Hamilton to the assistance often given after the head of the child has passed down within the cavity of the pelvis, by the pressure on the posterior portion of the vagina by two or three fingers within the canal, which would also often stimulate the uterus when contractions were apparently failing.

As to rupturing the membranes, if the patient has the appearance of an unusually distended uterus indicating a large collection of the liquor amnii, it is often to be inferred that the uterus does not contract regularly and the labor does not progress as well as it would were it not for this distension, and therefore he generally ruptured the membranes; in general, however, and in primiparous cases as a rule, it is not indicated; in primiparous cases, because we expect there will be more or less delay as the head comes to distend the perineum, and there

will be more or less heat and congestion resulting from the dryness caused by an early rupture.

In regard to the application of the forceps, he admitted the facility with which the instrument can be applied if the person has a mechanical mind and properly appreciates the canal of the pelvis.

In craniotomy, after the evacuation of the head, he takes away the bones without the soft covering, trying to leave the soft tissues so as to protect the mother from the irregular portions of the cranium which remain projecting through the scalp tissues.

Correspondence.

OUR KNOWLEDGE OF MEDICINES.

To the Editor of the Medical Record.

Sir—Your remarks upon our want of knowledge in medicines are eminently true, and they admit of very general application. There is one point which I think bears upon this question, which you have not alluded to. Every one must admit that our appreciation of the value of medicine is at a very low ebb; but there is a something behind which too many of us are apt to lose sight of, and that is a practical knowledge of those remedies which are really useful to every practitioner. The student only learns these by rote; and it being a mere effort of memory, their physical properties, action, and doses, soon pass from his recollection. He is not brought into practical familiarity with them. The teacher of this branch thinks that he has performed his duty, when lecturing upon a given drug, to pass the specimen of the same around in a bottle, and tell all about it, and then it is dropped; there being no account made of it, except a few lines in the note-book. The lecturer on the practice of medicine, unless, as you say, he dismisses the treatment with the magic words, "whiskey, quinine, and iron," only names an extra article or two that may be used; but how it is to be employed, and in what doses, he does not generally care to state. Even if he did, what particular practical utility would it be to the student, if it is not stamped indelibly upon his mind by some other means?

Your correspondent believes that much good could be done in this connexion by writing out the prescriptions which each patient treated in the clinics is to have. This could be done on the blackboard, and would take very little time, and be of great benefit in constantly keeping before the mind the necessity of being careful and intelligent prescribers. In order to render such an exercise more impressive, there would be no impropriety in giving the reason for prescribing such and such articles, and explaining their applicability to the particular case. Every young practitioner of our day feels that his knowledge of materia medica is, from the neglect of his teachers, very deficient; and when he is called upon to prescribe for his patients, he is naturally diffident about writing the prescription which he should. His memory merely supplies him with a very few remedies to select from, and these are still further reduced in remembrance, because he does not feel sure that he knows how to write for them. The consequence is very easily seen; and, with the exception of a few that he has selected from his limited list and combined to suit himself, he has nothing to fall back on. He is virtually discouraged at the onset, in his efforts to prescribe; and not wishing to be counted an ignoramus by his apothecary, he makes himself believe that, after all, therapeutics is a good deal of a humbug, all medicines act pretty nearly alike, there is no certainty in any, and so he gets to be a man with one idea.

But a mere knowledge of the names and uses of medicines cannot make accomplished prescribers. A physician who writes a prescription should know how to compound it himself. Now, how is it possible to possess this knowledge in the present system of instruction in materia medica? The answer is a very simple one. He should at first get behind some apothecary's counter, and should learn the art of skilfully and intelligently "putting up" prescriptions. No such instruction is contemplated in our colleges, and I am sorry to say there is but little promise that it will be done, at least for a long time to come. How many physicians write for articles which they would not know if they were shown them? Suppose a mistake should be made by the apothecary, would it be likely to be detected by the physician who might have the mixture presented to him afterwards?

In conclusion, I submit if it would not be a proper plan to recommend the different teachers to write their prescriptions upon the blackboard in every case where a prescription is given, and that a dispensing department should be attached to each college sufficiently large to give each student during some part of his pupilage a sufficient chance to compound such prescriptions.

I am, sir, truly yours,

G.

New York, February 9, 1867.

ETHER VERSUS CHLOROFORM.

To the Editor of the Medical Record.

Sir—The death by chloroform which recently took place at Bellevue Hospital, gives a sad interest to the question of surgical anæsthesia. The repeated accidents which have occurred in May, 1866, in Berlin; June, 1866, in Philadelphia; February, 1867, in New York, have naturally enough staggered the faith of many surgeons in the great anæsthetic.

Allow me, sir, to refresh the minds of your readers with reference to the past records of chloroform. As early as 1853, Baudens acknowledged eighty deaths, and A. Forzet found eighty-five. In 1859, Barrier de Lyon ascertained that there had been above two hundred deaths. Diday collected from that date to 1864, twenty-one cases registered in England, leaving at least as many which were unrecorded. If there was another drug instrumental in the destruction of so many lives, would it not be ejected from the *materia medica?* True, the fault has been put on the impurity of the article employed; but how often has chloroform been used in case of accident, in its purity, as in the instance at Bellevue; showing that it need not borrow its toxic properties from heterogeneous substances. Hence, from 1847, the date of the beginning of the use of anæsthesia, surgeons have been divided into two classes, the chloroformists and the etherists; and though the first-named had, at first, the advantage, their rivals have steadily persevered, patient and unrelenting, in their efforts to demonstrate the general efficiency and the absolute safety of ether.

In 1848, Cantu remarked that half of his chloroformized frogs died, and hardly any of his etherized ones. Sedillor admits, at the same date, that when he stops giving ether, anæsthesia may continue, but in no case become aggravated. Not so with chloroform; when discontinued after insensibility is produced, its action is continued, its symptoms may in some instances cause death. This circumstance constitutes the most marked difference between the anæsthetic rivals.

The few men who supported this view against triumphant chloroformists found an early and eminent representative in T. E. Petrequin, chief-surgeon of the Hotel Dieu de Lyon. For nearly twenty years he has

banished chloroform and used ether in that hospital, the largest in France, where from fourteen to fifteen thousand patients are treated annually, and where more operations are performed than in any other. From this telling experience, Petrequin, Diday, and in fact l'Ecole de Lyon, assert that pure ether has for years accomplished in their hands, without accident, those services that chloroform has rendered elsewhere at a cost of several hundred lives. Is not this question worthy of further study? Yours, etc.,

E. Seguin, M.D.

BLEEDING FROM THE TOOTH-SOCKETS.

To the Editor of the Medical Record.

Sir:—I am reminded by the paper and discussion at a late meeting of the *East River Medical Association*, as reported in your columns, of certain foot-notes in *Chelius' System of Surgery*, by the translator, Dr. South, which may be of value to those who may not have access to the work. The subject of "hæmorrhagic diathesis" is rather fully alluded to under the heading of "bleeding from the tooth-sockets."

A case is there related of a person in whom the hæmorrhagic diathesis was very strongly developed, who bled to death after the extraction of a second molar tooth for caries in spite of the application of the following remedies: lunar caustic to the bottom of the socket, a sponge-tent soaked in a so'u'ion of sulphate of copper, followed up by careful plugging of the socket. Brodie, who had been consulted, after three applications of the actual cautery, and careful plugging as before, finally resorted on the fourth day of the hæmorrhage, which had been subdued only for short intermissions, to ligature of the common carotid artery. The wound made in the operation bled very little at first, but in the course of a few minutes after the operation it began to bleed profusely. Ice to the wound, and ice to the left side of the face, appear to have had some effect; but the hæmorrhage afterwards returned and carried off the patient (July 7, 1816), a week from the time of the removal of the tooth. Another case is related where the hæmorrhage succeeding the extraction of two teeth at different periods, was checked by the *effectual* application of the actual cautery, after failure of means which very readily suggested themselves under the circumstances. The point made by the annotator is that the heated wire, not more than a line in thickness, should be made to descend to the very bottom of the socket, and thus command the bleeding vessel, which is the proper artery of the tooth. This, Dr. South thinks, should be resorted to at once before the constitutional powers are disturbed, and before a latent phthisical tendency is developed, of which he can recall an instance. The suggestion I think a valuable one, and certainly more rational than the introduction of the wax model recommended by Cortez, or the internal use of ergot by Dr. Ryan, whose successes are to be regarded rather as coincidences than as consequences.

Yours, etc.,

* * *

Albany, N. Y., March 7, 1867.

A COMMENT UPON AN OBSCURE PASSAGE.

To the Editor of the Medical Record.

Sir:—With a full appreciation of the sly humor of your correspondent "B," who, in his note to you of the 20th Feb., ult., *vide* vol. ii., p. 23, has taken due advantage of a typographical error, I hasten with becoming alacrity to do a simple act of justice to the gentleman who has thus been made the subject of mirthful comment. "B," I fear after the manner of too many expounders, twists his text, which as printed reads: "Amaurotic symptoms upon which a diagnosis of cerebral disease was based, according to Dr. Watson, were in *no* case found to have depended in reality upon a plug in a defective tooth."

By the simple substitution of *one* for "*no*," the meaning of the speaker becomes at once comprehensible. So, too, the reporter, had he not been compelled to write against time, might have said, *had been*, instead of "*was* based;" and even besides these two errors, might never have allowed a rather grave one of construction to have escaped his eye. But "proofs" may be corrected *ad infinitum*, as you are well aware, and still have many unaccountable typographical errors left.

Hoping, in common with all commentators, for a certain share of success in the elucidation of dark passages,

I remain truly yours,

J. S.

New York, March 6, 1867.

Obituary.

PROFESSOR HOWARD TOWNSEND, M.D.,

of Albany.

At a meeting of the physicians (graduates of the Albany Medical College), resident in Schoharie and Delaware counties, held at Stamford, Delaware county, February 2, 1867, Dr. C. C. Covil, Chairman, and Dr. J. D. Havens, Secretary, the following preambles and resolutions, presented by Dr. Havens, were adopted:—

Whereas, The ways of Providence are not as our ways, but are oft mysterious and past finding out; and,

Whereas, It has pleased Divine Providence in His inscrutable wisdom to remove from us in the full vigor of manhood, in the midst of a life of activity and usefulness, our beloved friend, associate, and medical teacher, Dr. Howard Townsend, who recently filled the chair of Materia Medica and Physiology; therefore,

Resolved, That we, in common with the Faculty and Alumni of the Albany College Hospital, and other institutions, sadly feel the loss of one to whom we feel deeply indebted for much of our knowledge in his special department, which he was ever ready and anxious to impart, not only in, but out of the lecture-room. We shall ever feel a deep sense of gratitude for his unwavering solicitude for the professional advancement of those under his instructions.

Resolved, That while he was ever careful to impart the *true* and *demonstrated* principles of science, and reject the *false* and *undemonstrated* (which he regarded as bursting bubbles on the great ocean of knowledge), he kept pace with its onward march, and ably and honorably filled positions of trust in the literary and scientific world. Prof. Townsend was not only the true physician, but the literary man and scientist. By his untiring energy he did much for the advancement of true principles, true science, and true knowledge.

Resolved, That while we regret with heartfelt sorrow his early death, yet we bow with submission to the will of Him "who doeth all things well." That we will ever cherish a lively sense of gratitude as we contemplate his benevolent qualities of heart, his urbanity of disposition, his generous impulses, and the true *Christian character* which marked his life.

Resolved, That we extend to the Faculty of the College, and to the literary, scientific, and educational societies with which the deceased was connected, our sorrow for the irreparable loss they have sustained; also, our

heartfelt sympathy to the family and friends of the deceased.

Resolved, That a copy of these resolutions be presented to the family, and also be published in the Albany *Argus* and Bloomville *Mirror*.

C. C. Coville, Pres't, Stamford, Delaware Co.
J. D. Havens, Sec'y, Jefferson, Schoharie Co.
E. W. Gallup, Jefferson, Schoharie Co.
R. G. Havens, Jefferson, Schoharie Co.
W. S. Layman, Gilboa, Schoharie Co.
Dr. Norwood, Conesville, Schoharie Co.
H. W. Bell, Croton, Delaware Co.
O. L. Butts, Bloomvil'e, Delaware Co.
C. S. Grant, Hobart, Delaware Co.
J. L. Allabon, Margaretville, Delaware Co.
J. B. Van Housen, Stamford, Delaware Co.
C. A. Gibson, Bloomville, Delaware Co.

New Publications.

ANNUAL REPORT OF THE DIRECTORS OF MOUNT SINAI HOSPITAL. Jan. 1867.

REPORT OF THE SANITARY RELATIONS OF THE STATE OF KANSAS; by C. A. LOGAN, M.D.

CASES OF ŒSOPHAGOTOMY FOR THE REMOVAL OF FOREIGN BODIES, with a history of the operation; by DAVID W. CHEEVER, M.D., Assist. Prof. of Anat. in Harvard University, etc. Boston, 1867.

INJURIES OF THE SPINE, WITH AN ANALYSIS OF NEARLY 400 CASES; by JOHN ASHHURST, Jr., A.M., M.D., Fellow of the College of Physicians of Philadelphia. Philadelphia: J. B. Lippincott & Co. London: Trübner & Co., 1867.

CONTRIBUTIONS TO THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF ANGULAR CURVATURE OF THE SPINE; by BENJAMIN LEE, M.D. Philadelphia: J. B. Lippincott & Co., 1867.

REPORT OF THE STATE SANITARY COMMISSION TO THE GOVERNOR OF NEW JERSEY.

THE INDIGESTIONS; OR, "DISEASES OF THE DIGESTIVE ORGANS FUNCTIONALLY TREATED;" by THOMAS KING CHAMBERS, Honorary Physician to H. R. H. Prince of Wales, etc. etc. Philadelphia: Henry C. Lea, 1867.

HEALTH IN COUNTRY AND CITIES. PRIZE ESSAY, AMERICAN MEDICAL ASSOCIATION. W. F. THOMS, M.D., N. Y.

GUIDE FOR USING MEDICAL BATTERIES, ETC., by ALFRED C. GARRATT, M.D., Fellow of Mass. Med. Society, and Member of American Medical Association. Philadelphia: Lindsay & Blakiston, 1867.

DIPHTHERIA—A PRIZE ESSAY; by E. S. GAILLARD, M.D. Richmond, Va.

SECOND ANNUAL REPORT OF THE DIRECTORS OF THE EXPERIMENTAL SCHOOL FOR IDIOTS AND FEEBLE-MINDED CHILDREN. December, 1866.

COMMUNICATIONS FROM THE GOVERNOR, TRANSMITTING THE REPORT OF THE COMMISSIONERS APPOINTED TO LOCATE THE HUDSON RIVER ASYLUM FOR THE INSANE OF THE STATE OF NEW YORK.

ILLUSTRATED CATALOGUE OF MATHEMATICAL, OPTICAL, AND PHILOSOPHICAL INSTRUMENTS. By J. W. Queen & Co., Philadelphia.

WATSON'S PRINCIPLES AND PRACTICE OF PHYSIC. ABRIDGED FROM THE LAST EDITION. By J. J. MEYLOR, A.M., M.D. Philadelphia: Published by the Author. 1867. Pp. 277.

THE SCIENCE AND PRACTICE OF MEDICINE. By WILLIAM AITKIN, M.D., Edin., Professor of Pathology in the Army Medical School, etc. In two volumes. Vol. II. With Additions by MEREDITH CLYMER, M.D., late Professor of the Institutes and Practice of Medicine in the University of N. Y. Philadelphia: Lindsay & Blakiston. 1866. Pp. 1,114.

INHALATION IN THE TREATMENT OF DISEASES OF THE RESPIRATORY PASSAGES, particularly as effected by the use of atomized fluids. By J. M. DECOSTA, M.D. Physician to the Pennsylvania Hospital, etc. Philadelphia: Lippincott & Co. 1867. Pp. 86.

Medical News and Items.

PERSONAL.

MEDICAL DEPARTMENT—U. S. A. APPOINTMENTS.—To be Chief Medical Purveyor, with the rank of Lieutenant-Colonel—Surgeon Richard S. Satterlee, U. S. Army, to date from July 23, 1866.

To be Assistant Medical Purveyors, with the rank of Lieutenant-Colonel, all to date from July 23, 1866—Surgeon Charles McDougal, U. S. Army; Surgeon Eugene H. Abadie, U. S. Army; Surgeon Robert Murray, U. S. Army; Surgeon Charles Sutherland, U. S. Army.

To be Surgeons, all to date from July 20, 1866—Assistant-Surgeon, Clinton Wagner, U. S. Army; Assistant Surgeon Jos. P. Wright, U. S. Army; Assistant-Surgeon Charles C. Gray, U. S. A.; Assistant-Surgeon William C. Spencer, U. S. Army.

To be Medical Store-keepers, all to date from July 20, 1866—George Wright, of Pennsylvania; George T. Beall, of New Mexico; Andrew Victor Cherbonier, of Maryland.

M. MAREY.—The celebrated author of the *Researches on Circulation*, and inventor of the Sphygmograph, Marey, has just exchanged his position of Substitute for that of Professor Suppliant to the chair of *Natural History of Organic Bodies*, in the College of France.

DR. WM. H. THOMSON, on the 7th instant, delivered a highly interesting lecture on Modern Statistics as applied to Ancient History, before the New York Historical Society.

DR. RUFUS K. BROWNE, on the same evening, discoursed on the Nervous System of Man and Animals, before the Association for the Advancement of Science and Art.

DR. WM. MANLIUS SMITH, of Manlius, Onondaga county, N. Y., desires us to state that any communications likely to add to our knowledge of the properties, etc., of Conium, would be acceptable to the above address, and that due credit in future reports will be given to the sources of such information.

DR. WILLIAM E. STILLWELL, an Alumnus of the College of Physicians and Surgeons, (class 1830), and member of the Medical Society of the County of New York, died in this city, February 6, in the 60th year of his age.

DR. SAMUEL DEMAREST, of the Northern Dispensary, died February 10, in the 29th year of his age.

DR. WM. B. LITTLE, American Consul at Panama, died of yellow fever, January 29th ult.

DEATH OF DR. HENRY BRYANT.—We are pained to hear of the death of Dr. Henry Bryant, of this city, which took place at Porto Rico on the first instant. Dr. Bryant was passing the winter in the West Indies in the pursuit of health, and in the collection of objects of natural history. He was an enthusiastic ornithologist, and to his liberality the Boston Society of Natural History is indebted for the recent donation of the magnificent La Fresnaye collection of birds. No particulars concerning his death have been as yet received.—*Boston Medical and Surgical Journal.*

AMERICAN MEDICAL ASSOCIATION.—The Eighteenth Annual Meeting of the American Medical Association will be held in Cincinnati, on Tuesday, May 7, 1867, at 11 o'clock A.M.

The following Committees are expected to report:—On Quarantine, Dr. Wilson Jewell, Pa., Chairman; On Ligature of Subclavian Artery, Dr. Willard Parker, N. Y., Chairman; On Progress of Medical Science, Dr. Jerome C. Smith, N. Y., Chairman; On the Comparative Value of Life in City and Country, Dr. Edward Jarvis, Mass., Chairman; On Drainage and Sewerage of Cities, etc., Dr. Wilson Jewell, Pa., Chairman; On the Use of Plaster of Paris in Surgery, Dr. Jas. L. Little, N. Y., Chairman; On Prize Essays, Dr. F. Donaldson, Md., Chairman; On Medical Education, Dr. S. D. Gross, Pa., Chairman; On Medical Literature, Dr. A. C. Post, N. Y., Chairman; On Instruction in Medical Colleges, Dr. Nathan S. Davis, Ill., Chairman; On Rank of Medical Men in the Army, Dr. D. H. Storer, Mass., Chairman; On Rank of Medical Men in the Navy, Dr. W. M. Wood, U.S.N., Chairman; On Insanity, Dr. Isaac Ray, R. I., Chairman; On American Medical Necrology, Dr. C. C. Cox, Md., Chairman; On the Causes of Epidemics, Dr. Thomas Antisell, D. C., Chairman; On Compulsory Vaccination, Dr. A. N. Bell, N. Y., Chairman; On Leakage of Gas-Pipes, Dr. J. C. Draper, N. Y., Chairman; On Alcohol and its Relations to Man, Dr. J. R. W. Dunbar, Md., Chairman; On the Various Surgical Operations for the Relief of Defective Vision, Dr. M. A. Pallen, Mo, Chairman; On Local Anæsthesia, Dr. E. Krackowizer, N. Y., Chairman; On the Influence upon Vision of the Abnormal Conditions of the Muscular Apparatus of the Eye, Dr. H. D. Noyes, N. Y., Chairman; On the Comparative Merits of the Different Operations for the Extraction of Vesical Calculi, Dr. B. I. Raphael, N. Y., Chairman; On the Therapeutics of Inhalation, Dr. J. Solis Cohen, Pa., Chairman; On the Deleterious Articles used in Dentistry, Dr. Augustus Mason, Mass., Chairman; On Medical Ethics, Dr. Worthington Hooker, Conn., Chairman; On the Climatology and Epidemics of Maine, Dr. J. C. Weston; of New Hampshire, Dr. P. A. Stackpole; of Vermont, Dr. J. Henry Janes; of Massachusetts, Dr. Alfred C. Garratt; of Rhode Island, Dr. C. W. Parsons; of Connecticut, B. H. Catlin; of New York, Dr. E. M. Chapman; of New Jersey, Dr. Ezra M. Hunt; of Pennsylvania, Dr. D. F. Condie; of Delaware, Dr. —— Wood; of Maryland, Dr. O. S. Mahon; of Georgia, Dr. Juriah Harriss; of Missouri, Dr. Geo. Engelman; of Alabama, Dr. R. Miller; of Texas, Dr. Greensville Dowell; of Illinois, Dr. R. C. Hamil; of Indiana, Dr. J. F. Hibberd; of the District of Columbia, Dr. T. Antisell; of Iowa, Dr. J. W. H Baker; of Michigan, Dr. Abm. Sager; of Ohio, Dr. J. W. Russell.

Secretaries of all medical organizations are requested to forward lists of their Delegates as soon as elected, to the Permanent Secretary,

W. B. ATKINSON, M.D.
215 Spruce st,
Philadelphia, Pa.

MEDICAL EDUCATION OF WOMEN IN EUROPE AND AMERICA.—A small audience gathered on the evening of the 28th ult., at the Hall of the N. Y. Historical Society, to listen to a lecture by Dr. Elizabeth Blackwell, entitled "The Medical Education of Women in Europe and America."

Previous to the commencement of the lecture RICHARD H. BROWNE, Esq., made a few remarks with reference to the history and workings of the New York Infirmary for Women and Children during the past thirteen years. The lecturer of the evening, he added, would speak in support of the Hospital College for Women, recently chartered by the State Legislature, and which it is hoped will soon be in successful operation in this city.

DR. ELIZABETH BLACKWELL then said, substantially: While travelling in Europe last summer, she had observed, with great interest, the increasing attention which was being paid to the subject of female medical education. She found that this idea of giving to women a wider knowledge of medicine than has ever been attempted before, is no longer an entirely new subject, as it was in Europe sixteen years ago. It is a subject of ridicule to some, of doubt to more, of decided approbation to a few; but whatever the feeling with which it is regarded, it is no longer ignored. Full credit or blame is attached to America for having originated this bold experiment of doctorship, and the leading medical journals of England uneasily assure their readers from time to time, that this foolish American humbug is quite exploded. Nevertheless, the lady-doctor is taking root even in England. The interest of the work there clusters around Miss ELIZABETH GARRETT, who has won a legal footing in the profession as Licentiate of the Apothecaries' Hall, and who has been for some time established as a medical practitioner in London. The French Medical School of Algiers has also admitted a lady student to its classes, offering her the same education and the same diploma that it gives to its male students. Such instances of the admission of women into medical schools have never occurred before; it is entirely a new experiment, directly due to the influence of American example. Some time ago, the Emperor of Russia gave a distinct commission to Dr. H. DE HAWROWITZ, who was sent over to inquire into the sanitary condition of our armies, to report also upon what part women were taking in medicine. This special commission grew out of the application of twenty-five Russian ladies for admission into the medical schools of St. Petersburgh; and as Russia did not want to lead in an innovation, she sent to see what America was doing. Last year, a commission from the Swedish government visited England for a similar purpose, fifteen young ladies having applied for the privilege of entering the medical college of Stockholm. Thus, in the most enlightened nations of Europe attention has been called to this new idea of giving to women the complete education of the physician; and though no institution has yet been formed for providing this higher education (the old schools of midwives being still the only system of instruction), yet, if the experiment succeed in this country, it will undoubtely be followed abroad. The speaker then urged, at great length, the necessity of united effort and liberal assistance in founding in this, the Metropolis of the New World, a college worthy of our people, in which females who desired to do so might gain, through a proper course of study and practice, a thorough knowledge of the science of medicine.

At the close of the lecture, which was listened to with unbroken interest, the financial report of the Hospital College, in prospect, was read by R. B. MINTURN, Esq. The paper set forth that the College had received its charter from the State Legislature, but that in order to carry out its provisions $100,000 were needed. Of this amount $25,000 had already been subscribed, and it was hoped that the deficiency, though large, would soon be made good. A number of subscriptions were then offered by persons in the hall, after which the audience dispersed.

THE THIRD ANNUAL REUNION OF THE O. Æ. SOCIETY, BELLEVUE HOSPITAL MEDICAL COLLEGE, took place on

the evening of February 25th, in the lecture-room of the institution. The auditorium was filled by a large assemblage of students and friends, male and female. Dr. George R. Kent presided, who, in a neat address, inaugurated the anniversary exercises, which included an essay, "The Healing Art," by J. W. Read, of New York; a poem, by J. Russ Evans, of Ohio; an address to the students and graduates, by Prof. George T. Elliott, M.D., and responses to the following regular toasts:—Bellevue Hospital Medical College, the Faculty, Alumni and members of the O. Æ. Society, and the Ladies, by Dr. James R. Wood, Dr. Frank H. Hamilton, Dr. Charles A. Lee, and Dr. Louis A. Sayre. The intellectual entertainment was agreeably interspersed with instrumental selections from standard operas, which pleasingly varied the proceedings. At the annual election of the Society the following gentlemen were chosen as officers for the ensuing year:—Ed. C. Harwood, of Vermont, President; William Sprague, of New York, Vice-President; C. G. Stedman, of Ohio, Secretary, and J. W. Bowden, of New York, Treasurer.

The Annual Commencement of the Medical Department of the New York University came off, March 1, in the chapel of the institution. There was a large attendance on the occasion, with an interesting and handsomely carried out programme. The valedictory address, which was short and suggestive, was delivered by Professor John C. Draper, who congratulated the graduates upon the completion of their college course, and pictured the duties that devolved upon them, and the honor that perhaps awaited many of them in the exercise of the most honorable of all the learned professions. Eight prizes were awarded for distinguished progress in their studies to as many students. A social supper closed the Commencement exercises.

The Annual Commencement of Bellevue Hospital Medical College was held at Steinway Hall, on the 28th ult. Prof. Isaac E. Taylor, President of the College, conferred the degree of M.D. upon 140 graduates, of whom forty-four were from New York, and the remainder containing representatives from nearly every State in the Union, including Georgia, Mississippi, Louisiana, and Virginia.

After the degrees had been conferred, the address to the graduates was delivered by John G. Saxe, Esq., the poet and humorist. Being in one of his happiest moods, he sent forth a vast fund of common sense, concerning "doctors and patients," his thoughts at times being clothed in the most grotesque garbs. The valedictory, by F. B. McNeal, M.D., of the graduating class, and a most artistic rendition by the orchestra of Bosquet's "Nightingale Polka," closed the exercises of the evening.

Long Island College Hospital.—The regular term of lectures in the Collegiate Department of the Long Island College Hospital, was commenced March 2. Darwin G. Eaton, M.D., Professor of Chemistry and Toxicology, was introduced by Dr. T. L. Mason, President of the Collegiate Department, and delivered a very interesting lecture on motion, heat, etc., making several experiments in the way of illustration. To show the force of gravitation he drew a five-pound weight to the ceiling, a height of sixteen feet, letting it fall to the floor. This weight, before reaching the floor, he said, was going with double the speed it was when it started, showing that it was at the rate of thirty-two feet per second. This was precisely the rate of speed of all motion, for should this weight continue falling, it would not fall faster than thirty-two feet per second. He held that the motion was not destroyed by the striking of the weight upon the ground. If he had a delicate thermometer he would show that the weight had become heated by the motion. Heat was therefore obtained from motion; and to illustrate this he struck a copper wire several times with a hammer, producing heat enough to light alcohol. Fire might be produced in three different ways—by percussion, friction, and compression, and he gave illustrations in each. He spoke of the motion of the earth and said that, according to the calculation of Dr. Meyer, if the world should come in contact with another body, the concussion would be sufficient to set fire to and burn fourteen such worlds.

The First Annual Commencement of the New York College of Dentistry was held at Steinway Hall, March 6. The Degree of D.D.S. was conferred upon nine graduates, and speeches were delivered by Dr. Eleazar Parmly, President Board Trustees; His Hon. Mayor Hoffman, and Professor Frank H. Hamilton.

Alumni Association, University Medical College.—After several informal meetings, an organization of a Society of the Alumni of the Medical Department of the University of the City of New York, was completed on Friday evening, March 6, in the council-room of the University. The following officers were elected: Dr. Samuel S. Purple, of N. Y., President, class of 1844; Dr. J. B. M'Cann, of Virginia, class of 1843; Dr. Solomon Satchwell, of N. C., class of 1845; Dr. Daniel Ayres, of Brooklyn, class of 1845; Dr. Henry S. Hewit, class of 1847; Dr. James R. Leaming, of N. Y., class of 1849; Dr. Frederick D. Lente, of Cold Spring, class of 1849, Vice-Presidents; Dr. H. Mortimer Brush, 1862, Secretary; Dr. George K. Smith, of Brooklyn, 1859, Treasurer; Dr. H. M. Sprague, of West Farms, 1861, College Historian; Dr. George T. Elliot, Orator. Councillors, comprising one from each class, were also elected, as well as a Committee of Nominations and Arrangements. It was voted that a meeting be held in October, when the address of Dr. Elliot is to be delivered, and an alumni supper given. There was a large attendance of the alumni residents in N. Y. and vicinity.

Bellevue Medical College—Alumni Association.—A meeting of graduates of the Bellevue Hospital Medical College was held at the college lecture-room, on the 28th ult., by adjournment from a similar meeting on the 26th, for the purpose of taking preliminary steps towards the organization of an association of the alumni; Dr. L. M. Yale in the chair. A committee, appointed at the previous meeting, presented a partial report upon a form of organization, which was recommitted with instructions to report in full at a general meeting of the alumni of the college, to be held at the same place on the evening of Thursday, 28th March, at eight o'clock.

Post-Partum Hæmorrhage arrested by Ether Spray Externally.—Dr. Braxton Hicks (*Lancet*) reports a case of the successful application of the ether spray to post-partum hæmorrhage. The usual remedies were at first resorted to, and failed; but the nebulizer caused the uterus instantly to contract, and so it remained.

Cholera in Durham.—The townships of Coxhoe and Quarrington (near Durham) have lately been visited with cholera. Both these villages suffered severely during the epidemic in 1849. The sanitary authorities are exercising every precaution against its spread.

Errata.—Page eleven, first column, sixth line from bottom of page, for *Loibrich* read *Liebreich*; for *sectore*, fifth line, read *rectus*; fourth line, for *ends* read *end*. Second column, fourth line from top, for *sücklayering* read *rücklagerung*; eighth line, for *tenotome* read *tenotomy*.

Original Communications.

DESCRIPTION OF

AN IMPROVED EXTENSION APPARATUS

FOR THE TREATMENT OF

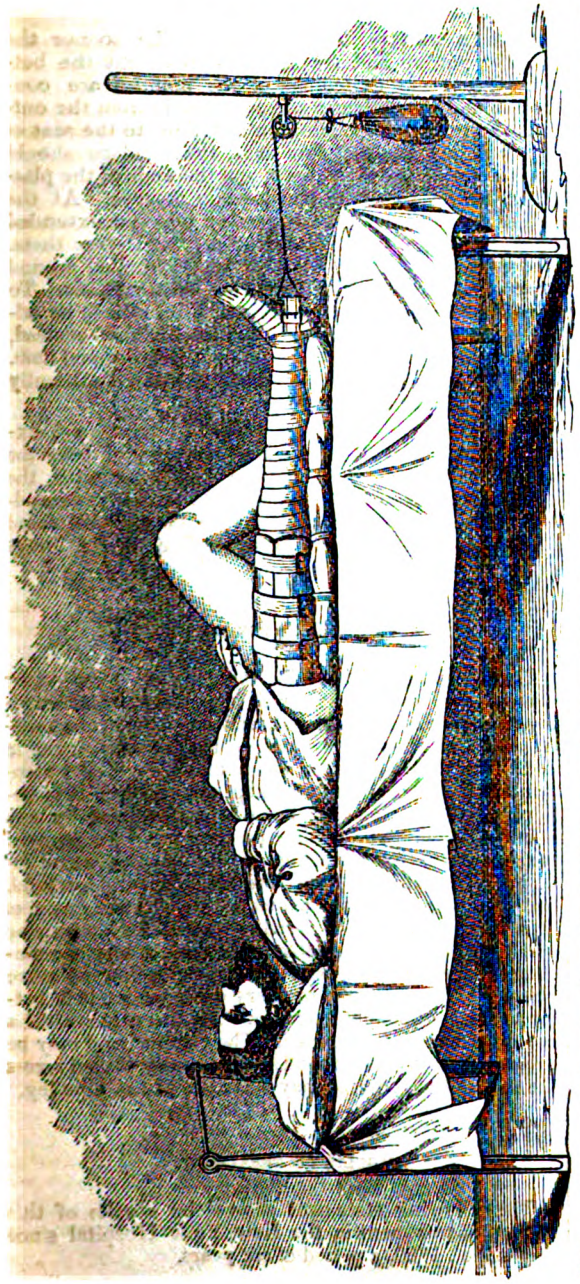
FRACTURE OF THE THIGH,

IN USE IN THE NEW YORK HOSPITAL FOR THE PAST SIX YEARS, AND IN THE UNITED STATES ARMY GENERAL HOSPITALS DURING THE CIVIL WAR.

INTRODUCED BY

GURDON BUCK, M.D.,

SURGEON TO THE NEW YORK HOSPITAL, ST. LUKE'S HOSPITAL, ETC., ETC.



ARTICLES COMPOSING THE APPARATUS.

Fig. II.—Two bands of adhesive plaster spread on Canton flannel or thick twilled cotton; each band being two inches and a half wide and two feet long. At the end of one of the bands, a piece of elastic rubber webbing, *a*, two inches wide and ten long, is attached. At one end of the other band, a buckle, *b*, of corresponding width, is fastened.

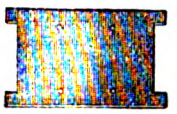


FIG. 3.

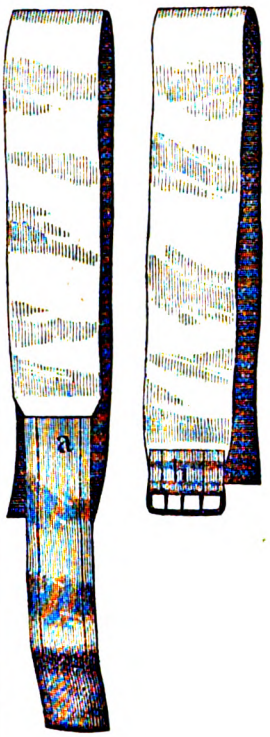


FIG. 2.

FIG. 4.

Fig. III.—A thin block of wood three inches and a half wide transversely, and three inches vertically.

A PERINEAL BAND FOR COUNTER-EXTENSION.

Fig. IV.—*a*, The perineal portion consists of rubber tubing of one inch calibre, having inside of it a tube of muslin stuffed with bran, and left an inch longer than the rubber tube at both ends. At each end of the muslin tube, a metallic ring is first fastened, and then shoved within the rubber tube, to the end of which it is also fastened. This arrangement preserves the rubber tube from being over-stretched.

b b, Two straps fastened to the rings at the ends of the perineal portion, serve to lengthen it and allow it to be made fast to the head of the bedstead.

c, A belt that passes around the opposite side of the body, and maintains the bearing of the perineal band in a line with the axis of the body and limb. The perineal portion should be wound with a narrow strip of Canton flannel or other soft material, and this should be changed as often as soiled.

Fig. V.—Four guttered coaptation splints, covered with flannel, are intended to surround the fracture and be secured in place by three elastic bands, each having a buckle at one end.

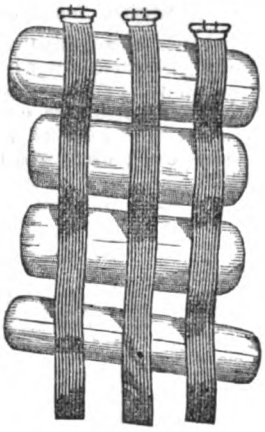


Fig. 5.

Fig. VI.—An upright supporting a pulley wheel *a*, to be fastened to the floor by three screws, opposite the foot of the bed.

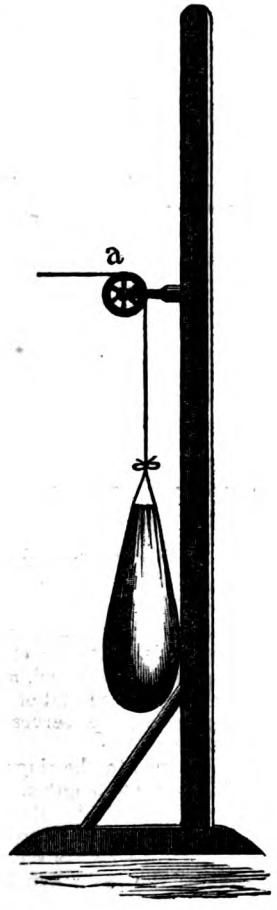


Fig. 6.

MODE OF APPLICATION.

The bands of adhesive plaster are first to be applied, one on either side of the limb from a point above the ankle upwards as high as the seat of fracture. The limb is then to be bandaged in the usual manner, beginning at the toes and covering the plasters, but leaving their lower ends free. The band of elastic webbing is next passed round the sole of the foot and fastened to the buckle on the other side of the foot. The block of wood should then be interposed between the loop of webbing and the foot. A cord fastened to the block thus adjusted is passed over the pulley, and has a weight suspended from it. This arrangement combines elasticity with the extending force, keeps the bands stretched out smooth, and prevents pressure upon the ankles. The amount of weight required must be proportioned to the resistance to be overcome, and the toleration of the patient. Sometimes five or six pounds only can be borne at the outset, and an increased weight subsequently.

After a fracture has taken place the sooner the limb is put up and subjected to treatment the better. Spasmodic twitchings of the muscles are controlled, and the patient made comfortable from the outset. To permit the application of lotions to the seat of injury during the first few days, the bandage should not be carried above the knee, and the ends of the plaster should be rolled up and kept in reserve. At the end of six or eight days the plasters may be extended up on the thigh, and the bandage contined over them. The coaptation splints are now to be applied around the thigh and secured by the three elastic bands. To complete the apparatus the perineal band should be adjusted and its ends fastened to the head of the bedstead, so as to be in a line with the axis of the body and limb. The limb should be raised on a hair cushion sufficiently to keep the heel from pressure.

In the employment of this method of treatment, experience has shown that in a large majority of cases the use of the perineal band may be dispensed with, the weight of the body being sufficient to resist the extending force. This resistance may be further increased by raising the foot of the bedstead five or six inches above the floor.

ADVANTAGES OF THE METHOD.

The advantages claimed for this method over others heretofore in use, are its great simplicity of arrangement, facility of management, and especially the comfort it affords the patient during a long confinement in bed. The efficiency with which uninterrupted extension of the limb can safely be kept up, secures, it is believed, better results than have been obtained by any other method. The sitting posture may be allowed without disturbing the action of the apparatus: an indulgence for which patients are always very grateful, and one which greatly alleviates the irksomeness of their condition. The materials required for employing this treatment are obtainable under almost any circumstances, the only indispensable article being adhesive plaster. If this is of the ordinary description, it is better to use it of double thickness. All the other articles requisite may be improvised. The elastic band may be dispensed with, and a round stick properly placed across the foot of the bedstead may serve instead of a pulley.

RESULTS OF TREATMENT.

The following statement shows the results of this method of treatment in the New York Hospital since September, 1860, a period of six years.

TOTAL NUMBER OF SIMPLE FRACTURES OF SHAFT OF OS FEMORIS TREATED. 146 CASES, AGED FROM 2 YEARS TO 63 YEARS.

Under 15 *years of age*, 54 *cases, of which* 45 *male*, 9 *female.*

Primitive Shortening in 46 of 54 cases.	Weight employed in 38 cases.	Result of Treatment in the 54 cases.
⅛ inch to 2⅜ inches. Average 1⅛ inches.	3 pounds to 20 pounds. Average not quite 9 pounds.	No Shortening in 38 cases. Maximum of Shortening, 1 inch in 2 cases. Average of total 54 cases, about 1-6 inches.

Over 15 *years of age*, 92 *cases, of which* 79 *male*, 13 *female.*

Primitive Shortening in 83 of 92 cases.	Weight employed in 79 cases.	Result of Treatment in 89 cases recorded.
⅛ inch to 3⅜ inches. Average 1⅜ inches.	3 pounds to 28 pounds. Average 14½ pounds.	No Shortening in 12 cases. Maximum of Shortening. 1½ inches in 2 cases. Average scarcely ⅛ inch.

In all cases the measurement was taken with a graduated tape from the anterior superior spinous process of the ilium, to the extremity of the internal malleolus.

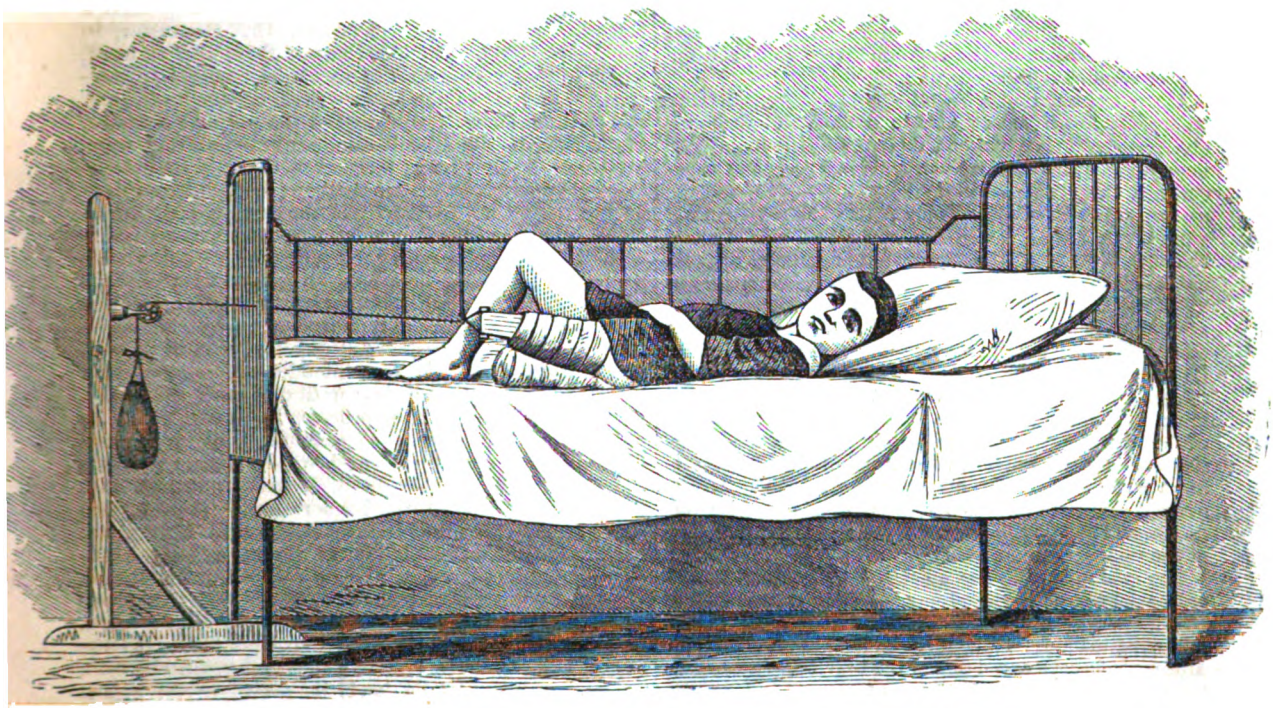
The employment of a weight and pulley, for the purpose of maintaining constant extension of the limb in the treatment of morbus coxarius, was first brought to the notice of the medical profession in New York by Henry G. Davis, M.D., and to this source the author acknowledges his indebtedness for the suggestion of its application to the treatment of fracture of the thigh.

APPLICATION OF THE METHOD TO STUMPS.

Another important application of the weight and pulley extension has been made by A. Hermance Smith, M.D., Assistant Surgeon U. S. Army, to the treatment of stumps of the lower limb, in which retraction of the soft parts leaves the end of the bone exposed, and sometimes necessitates re-amputation. It was first employed by Dr. Smith in the U. S. Army General Hospital at Frederick, Maryland, in September, 1862.

Subsequently, Assistant-Surgeon Robt. F. Weir, M.D., in charge of the same hospital, extended its use to the treatment of stumps immediately after amputation to prevent painful twitchings, and found it afforded great comfort to the patient, and that without interfering with the application of the requisite dressings to the stump.

It has since been extensively employed in civil as well as military practice, and its superiority established as the best means we possess of preventing retraction.



CAUSE OF CHOLERA.—Dr. Klob has, with the use of a microscope of from eight hundred to a thousand magnifying power, discovered in the rice-water evacuations, millions of microscopic fungi, which, in appearance, differ little from the ordinary European forms; and that they form the basis of the frightful malady, and that cholera is easily propagated by their means, can scarcely any longer be doubted.

THE HIGHEST POINT INHABITED.—The highest inhabited place upon the face of the globe is a farm-house situated 13,500 feet above the level of the sea, or about two miles and a half above the level. This lofty and elevated habitation is situated near the highest peaks of the Andes in South America, Chimborazo, which rises to 21,449 feet above the level of the sea.—*Exchange.*

CASES OF SUB-MUCOUS FIBROID TUMORS OF THE UTERUS.

By WM. WARREN GREENE, M.D.,

PROFESSOR OF SURGERY IN BERKSHIRE MEDICAL COLLEGE, AND IN THE MEDICAL SCHOOL OF MAINE.

In the autumn of 1864, I was consulted by Mrs. —— of Hampden co., aged 53. She was not married until after the termination of her menstrual life, which ceased eleven years ago. About eight years ago, she began to suffer from pain and sensations of weakness and dragging through the pelvis, accompanied by occasional slight hæmorrhages. Within the last three years there had been a marked aggravation of all these symptoms, especially of the hæmorrhage, which for the year past had amounted to alarming floodings, several of which attacks had nearly proved fatal, and from the effects of one of which she did not have time to rally before another occurred.

She was now extremely anæmic and debilitated, and her mind anxious and depressed.

She had been under the care of several physicians, all of whom had pronounced her disease the "*turn of life.*" One had made a vaginal examination and pronounced the uterus healthy.

When will physicians learn, and through their lady patients, that a woman with *healthy uterus and ovaries* passes out of her menstrual life as safely as she enters it? It is a burning shame that this term should be used as often as it is, to cover professional ignorance or carelessness, and thousands of poor, suffering women be physically ruined, simply from the want of an intelligent examination of the reproductive organs, and the proper treatment thereof.

Upon examination, I found the uterus considerably enlarged, smooth and regular in outline, and the neck obliterated. There was no dilatation of the *os*. The impression everywhere given to the finger, and especially in the posterior *cul-de-sac* of the vagina, and *per rectum*, was that of a firm body within the cavity of the womb. A sound passed five and a half inches along the *anterior* wall of the uterus, but if curved, it could not be rotated in the cavity. The impression conveyed by it was that of a firm mass occupying the posterior and upper portion of the cavity. I now commenced the dilatation of the *os* with sponge-tents. I was obliged to do this slowly, as the process caused her much pain and nausea. At the end of a week it was completed, and with my hand in the vagina I could examine the cavity of the uterus digitally. Just within the *os* on the posterior wall was felt a tumor, regular in outline and imparting a yielding semi-elastic feeling to the finger. It was evident that there was something more above this; but its size and location prevented a satisfactory exploration of the upper portion of the cavity.

The patient was now etherized and placed in the ordinary position for lithotomy. With the assistance of Drs. Smith, Brewster, and Paddock, I operated in the following manner: Having seized the posterior lip with Museux's forceps and dragged the organ downwards as far as practicable, the instrument was placed in the hands of an assistant, and with a long-handled, probe-pointed bistoury I divided the mucous membrane over the surface of the tumor, which I then with the fingers and lithotomyscope enucleated and removed. It appeared to be a soft fibroid, and was so tender as to break into many fragments during its removal. A firm mass could now be felt above, and the mucous membrane was incised from the fundus downwards. With the scoop and handle of the bistoury, the tumor was so far uncovered as to enable me to seize it with a large pair of lithotomy forceps and turn it from its bed. It was too large to pass through the *os*, and was, therefore, divided into two parts and removed. It was a firm fibrous tumor, presenting the lobulated condition which so often obtains in fibroids of the parotid region. The hæmorrhage during the operation was considerable, although not alarming. After the uterine cavity was cleared, it soon ceased without any interference. The shock to the system was severe; for several hours the pulse was very feeble, surface and extremities cold, and the respiration sighing. By the following morning, however, reaction was fairly established; and under the influence of anodynes *pro re natâ*, twenty-three drops of the muriated tincture of iron every four hours, a nourishing diet, and frequent vaginal injections of warm chlorinated solutions, she recovered without a bad symptom. In three weeks she was able to return home. In the following spring she called upon me, on her way to Iowa to visit some friends, a strong, healthy, happy woman, having had no return of hæmorrhage or pain.

Case II.—Mrs. ——, aged fifty, was married when twenty-eight; never was pregnant; ceased menstruating when forty; always enjoyed good health until the spring of 1863, when she began to suffer from pain through the lower portion of the abdomen and pelvis, associated with occasional discharges of blood from the vagina. These hæmorrhages gradually increased in amount and frequency, as did the pain in severity, until she became anæmic and much debilitated, being obliged to assume the recumbent posture the greater part of the time. It was during an attack of flooding that I first saw her with her physician, Dr. Brewster, in September, 1865. The blood flowed from the os uteri, which to the eye and touch presented a natural appearance. The body of the organ was slightly retroflected, and its posterior wall, with that of the upper portion of the cervix, enlarged and firm, and unyielding upon pressure. At first I was inclined to think this inflammatory hypertrophy and induration; but, upon introducing the sound, the cavity of the uterus seemed to be slightly encroached upon at a point corresponding with the external swelling. I was now satisfied that we had to deal with some morbid growth in the walls of the uterus, but whether benign or malignant was not clear. To control the hæmorrhage, and at the same time open the *os* for further examination, a sponge-tent was inserted, which it was intended to follow with larger ones of graduated sizes, until thorough dilatation was accomplished. The process, however, was so painful, and her debility so extreme, that we were obliged to wait until her strength was built up, relying in the meantime upon injections of Monsel's solution into the cavity to control the hæmorrhage. This in full strength controlled the bleeding for the time being, and gave very little pain. If diluted to any extent, however, it produced severe uterine *tormina*. Tr. iodine undiluted was used several times, but it did not prove sufficiently styptic, although it gave very little pain. In about three months we were enabled to dilate the *os* satisfactorily. The patient was placed upon the back exposed to a good light, and the posterior lip seized with tenaculum forceps and the organ dragged well down into the vagina. I was now enabled to carry the finger within the womb above the point of swelling, which, from this examination conjointly with a rectal exploration with the forefinger of the opposite hand, evidently arose from a small fibroid imbedded in the uterine tissue. The mucous membrane over the tumor was abraded, and blood oozed from its surface. Having introduced a Sims speculum, I incised the mucous membrane with a scalpel. The tumor, however, was covered

by a layer of uterine fibres, which were divided; and after a tedious dissection, performed principally with the handle of the scalpel, a scoop, and the fingers, the tumor, about the size of a pullet's egg, was removed.

The principal difficulty attending the operation arose from the intimate blending of the growth with the surrounding parts. So close was this that, of necessity, some shreds of the normal structure were removed during the operation, and fragments of the tumor left behind, which were afterwards thrown off as sloughs. There was considerable hæmorrhage, which was controlled by persulphate of iron. No anæsthetic was used, and the patient bore the operation very well. She was kept quiet in bed; anodynes given *pro re natâ*; tr. ferri murias, twenty drops every four hours, and a bland nutritious diet ordered; vagina to be washed twice a day with chlorinated lotions. For several weeks there was considerable sanguineo-purulent discharge, and after this had ceased she had for three or four months occasional *slight* hæmorrhages, giving rise to a suspicion that other growths of a similar nature might exist higher up in the cavity. A careful examination, however, revealed nothing, and it was hoped that the bleeding proceeded from the site of the ablated tumor, cicatrization not being complete. Tr. iodine was injected repeatedly, and eight months ago she had the last appearance of blood. Three weeks since she called at my office and reported herself in perfect health, a statement which her general appearance fully corroborated.

In this connexion I would say that I have repeatedly used injections of liq. ferri persulph. and tr. iod. undiluted into the womb, and have never encountered any serious results. In another patient of Dr. Brewster's from whose *cervix uteri* we removed a fibroid, and with whom I had much to do, we repeatedly made these injections with but little subsequent disturbance, while a solution of moderate strength of iodine gave excessive pain.

Case III.—Oct. 1st, 1864, was called to see Mrs. T., of Madison co., N. Y., in consultation with the late Prof. Timothy Childs, M.D. For two years and a half she had been suffering from pelvic and abdominal pain, accompanied by frequent and oftentimes alarming uterine hæmorrhages. Eighteen months before she noticed a firm tumor of considerable size in the hypogastrium, which had gradually increased until now she was as large as a woman seven months pregnant. The diagnosis of several physicians who had previously examined her, was ovarian tumor. The fact, however, that the tumor was hard, a regular ovoid in shape, occupying the median line, resembling precisely a gravid uterus; and that, *per vaginam*, the feel was that of a child's head within the uterine cavity, and also that Simpson's sound was not long enough, even when the handle was carried clear to the *os*, to reach the fundus, the instrument hugging closely the anterior wall, and not admitting of rotation of curve; proved that we had an intra-uterine tumor situated upon the posterior wall of the organ. That it was sessile, was evident from the fact that at no point could a sound be passed behind it.

As Prof. Childs left for New York at this time, the patient came into my hands for treatment. For the purpose of a more thorough examination, I dilated the *os* with sponge-tents sufficiently to enable me to touch with the tip of the finger the lower portion of the tumor. The parts were very rigid, and the process of dilatation a very tedious one. The sensation imparted to the finger and through the sound was that of a soft fibroid growth, and I made a crucial incision in the lower portion and inserted pledgets of lint saturated with glycerole of perchloride of iron, with the hope of producing a slough. In this, however, I was disappointed, and I repeated the tents, determined, if possible, to produce more complete dilatation, and then to repeat the incision more extensively. For this purpose I had some very large tents made of *thoroughly* compressed sponge, changing them every two days, until the *os* was satisfactorily opened. I visited her one morning with the intention of again incising the mass, when, on removing the tent, I found attached to it a little irregularly shaped mass as large as a filbert, which I judged to be a portion of the tumor, and which my friend and partner, Dr. Paddock, found on microscopic examination, to possess the structure of a soft fibroid. It now occurred to me that possibly with tents of large size carried far up between the anterior uterine wall and the tumor, a sufficient amount of pressure might be produced to destroy enough of the mass to insure the sloughing of the remainder; it being well known that the vitality of these growths is so low, that if any considerable portion be destroyed, destruction of the balance soon follows. Accordingly I selected the largest sponges I could find, from which Mr. Geo. Meade, of this place, made me some tents, varying in length from four to six inches. One of these I pushed *entirely within* the uterine cavity, a loop of tape to which it was *firmly* attached hanging from the *os*. For twelve hours subsequently she experienced very severe pain, like the throes of ordinary labor; the tent was retained, however, till the next day, when it was removed and a larger one introduced. Upon the removal of the sixth tent, it was followed by several small fragments of the tumor, and upon thoroughly rinsing the uterus with warm water, the discharged fluid was loaded with little particles of the same. From this time the process of destruction went on. There was a constant, and oftentimes profuse, offensive discharge, loaded with particles, shreds, and lumps of the tumor, occasionally a mass as large as a hen's egg being thrown off, for the ready expulsion of which it was occasionally necessary to dilate the contracting *os*; and sometimes a larger mass detaching, which I crushed with forceps to facilitate its exit from the cavity. This process occupied fully four months for its completion, during which time, it is hardly necessary to say that the patient's sufferings were extreme, and her situation oftentimes very critical. She had by inheritance, however, a fine, elastic constitution, and in addition to a high degree of intelligence, possessed an unusual amount of moral courage.

The uterus and vagina were thoroughly washed twice a day with warm solutions of compound solution of bromine, tr. ferri murias, in twenty to forty drop doses three or four times daily, stimulants and anodynes *pro re natâ*, and a full nutritious diet given. She has had no hæmorrhage since June, 1865. The following September I made a careful examination and found the process of uterine involution to have advanced considerably. No discharges. Had regained her color, and to a considerable degree her flesh and strength. Made another examination one year ago to-day. Uterus much smaller than in September. Had had no discharge, and expressed herself as feeling perfectly well. Last April she moved to Illinois with her family, where she now resides in perfect health. I hear from her almost every week through her numerous friends who reside here, to one of whom she wrote a fortnight since, "I am perfectly well."

Pittsfield, Mass.

Public Urinals.—A bill is to be introduced into the New York Legislature establishing public urinals in the city of New York.

A CASE OF
INTERNAL ADMINISTRATION OF CHLOROFORM FOR SUICIDAL PURPOSES.

DEATH ON THE EIGHTH DAY FROM ACUTE GASTRITIS; POST-MORTEM EXAMINATION; WITH OTHER CASES.

By O. D. POMEROY, M.D.

Mrs. D., aged forty-five, on Sunday, Dec. 19, at half past one P. M., swallowed from five to nine fluid drachms of chloroform, in an undiluted state, for the purpose of self-destruction. At the time she was just recovering from a drunken debauch, to which she was occasionally subject. Physicians were immediately sent for, but none could be obtained until half-past four P. M., when Dr. Stout came.

He found the patient in a state of profound coma, extremities cold, pulse about 70, and feeble. Death seemed so imminent that no effort was made to counteract the effects of the poison.

From the attendants I learned that the chloroform produced sleep in a very few minutes; the exact time I could not determine.

At seven P.M., Dr. S. saw the patient again; she had somewhat reacted, but it was still impossible to arouse her. The extremities were now warm, pulse about 80, and pretty full. At ten P.M. she recovered consciousness, would speak if spoken to, but seemed disinclined to notice things. An intense burning pain at the epigastrium was from this time until death a constant symptom.

A bowl of strong coffee was administered, which produced no sensible effect. A movement of the bowels, somewhat resembling coffee-grounds, now occurred. Vomiting commenced soon after, and continued with varying intervals until the termination. The attendants left her at twelve, midnight, and did not see her again until next morning; she then said she had not slept during the night, but seemed drowsy, and occasionally would sleep for a few minutes. This condition of things, however, did not remain long, as during a greater part of the day there was no inclination to sleep. The Doctor saw the patient again on Monday morning, and diagnosticated the case as acute gastritis. The principal symptoms now were, intense pain in the epigastrium, and constant vomiting. The liquor calcis, flour and milk were administered, and a blister on the epigastrium.

There was no movement of the bowels after the one just alluded to.

The patient complained of a hacking cough; respiration somewhat impeded—the mind clear.

At no time was she inclined to take nourishment, as she had never relented in her desire and determination to die.

On *Tuesday*, five grains of calomel were laid dry on the tongue, but were returned by vomiting as soon as swallowed; at the same time beef-tea was given per anum, which was passed almost immediately—condition of things not materially changed.

Wednesday, as the result of a consultation, a pill containing two grains of calomel and one-eighth of a grain of morphine was given once in four hours, until three were taken; milk punch was also administered, but was soon rejected by vomiting—respiration a little worse, pain in the stomach less.

On *Thursday*, the vomiting was less frequent; there was no sleep, other symptoms remaining as before, except a jaundiced condition of the skin and eyes, which gradually increased until death.

Friday, dosed at intervals, although was easily aroused; no nourishment was taken, as it would be retained by neither the stomach nor bowels. There was vomiting of blood, evidently from the stomach, of a dark-colored matter and partially coagulated.

On *Saturday*, Dr. S. saw the patient with another medical gentleman, when an enema of quinine, brandy, morphine, and beef-tea, was given, which was instantly rejected. There was some vomiting of blood, but less than on the previous day.

Sunday, she drank a glass of milk, and eat a little bread and milk, being the only nourishment retained from the first. The physician in attendance did nothing, as the case seemed hopeless. There was no vomiting, but most of the remaining symptoms were intensified, especially the tendency to coma, and the dyspnœa. She gradually sank and died at half-past twelve A.M. The amount of blood thrown up was a little more than half a pint. The mucous membrane of the tongue, mouth, and fauces, was eroded by the action of the chloroform.

Post-mortem examination at half-past three P.M., Monday. No external signs of disease; rigor mortis fairly marked; patient very fat, weighing nearly two hundred pounds; heart containing a moderate amount of blood and somewhat fatty; left lung imperfectly collapsed and slightly adherent to the pleura, but otherwise healthy; right lung—lower lobe—in a state of grey hepatization; other portions healthy; liver, normal size, fatty, and presenting signs of commencing cirrhosis in one of its lobes; kidneys, about normal size and a little granular; œsophagus, presented nothing worthy of observation; the stomach exhibits a pretty decided fulness of its blood-vessels, with a spot of extravasation on the inner surface of its wall, nearly an inch in diameter; its mucous membrane at this point seems to be destroyed, and undoubtedly, had the disease progressed further, a perforation of the entire wall of the stomach would have resulted. The vomited blood, and the coffee-colored passage (undoubtedly blood), very probably came from the stomach.

It seems reasonable to suppose that gastritis was the cause of death, of course superinduced by the chloroform, which seems to have acted as a corrosive poison; the narcotic effect of the drug not destroying or doing more than somewhat endangering life, the quantity taken being insufficient, as cases like the following sufficiently prove.

A soldier, aged twenty-seven, on furlough and in a state of drunkenness for several days past, seeing a bottle on a table, which he thought contained alcohol, drank off its contents, which consisted, in fact, of twelve and a half drachms of chloroform.

He was found soon after vomiting, and soon became insensible, still continuing to discharge mucosities. The pupils were enormously dilated, and his aspect was cadaveric; respiration was stertorous, the pulse 100 and feeble, and the action of the heart occasionally tumultuous. There were present utter loss of consciousness, complete resolution of the limbs, and absolute general anæsthesia.

After a short period the pulse became insensible, the respiration was arrested every now and then, and there was tracheal *râle*. Stimuli to the surface and artificial respiration were resorted to, and strong coffee infusion injected. The alarming condition continued three hours, the anæsthesia remaining complete and the pupils dilated, while occasional contraction of the limbs was observed.

An hour later, however, the pulse rallied and the skin became warmer, but anæsthesia still persisted. At the end of the sixth hour, the amelioration was very manifest, and in another hour he was carried to the hospital.

He retained no memory of what had passed, and neither convulsions nor delirium ensued, and next day he complained of little but what might be due to his excess in drinking. Reported to Medical Society of the Haut Rhin, and published in *Union Med.*, No. 127, and the *Medical Times and Gazette*, Nov. 5, 1864.

H. Pringle reports a case for James Spencer, Esq., Edinburgh, in *Braithwaite's Retrospect*, part 34, p. 295, in which two ounces of chloroform were swallowed by a female servant, aged twenty-one, in the Royal Infirmary, Edinburgh, without causing death. It is due to the physicians, however, to state that the preservation of life was undoubtedly due to the very zealous and effective treatment she was subjected to.

Her symptoms were somewhat as follows, viz. perfect unconsciousness when first observed; twenty minutes after taking the drug, there was no smell of chloroform in the breath; pupils much contracted; conjunctivæ quite insensible; pulse at first not much affected, but eventually entirely disappeared for a short period; respiration at first little to be noticed, but afterwards was reduced to two or three per minute, and for two minutes ceased altogether and the jaw fell; half an hour afterwards, however, there were signs of returning animation; the pulse gained strength; the breathing became less embarrassed. *Her breath now smelled of chloroform;* pupils widely dilated; sensibility of conjunctivæ returning; extremities recovering their warmth; consciousness slowly returning. In six hours after taking the chloroform she answered when spoken to; on the next day perfectly sensible; pulse 100, soft; respiration unembarrassed; pain in abdomen; thirst and great nausea; tongue moist and considerably swollen and painful.

For the next three or four days had pain in the bowels, and tenderness when pressed upon; some vomiting and purging (blood being passed); pulse pretty rapid, etc. On the 25th, returned to her work.

The treatment in this case was sinapisms to the extremities and to the epigastrium; stomach-pump (emetics could not be swallowed), mustard introduced into the stomach by the pump, again to be withdrawn; aromatic spirits of ammonia and brandy introduced by the same means; stimulating enemata; tongue held forwards by forceps to prevent closure of the glottis; enemata of beef-tea and brandy, often repeated; galvanism and artificial respiration.

A black draught was administered by the stomach-pump, in order to dislodge the chloroform from the bowels, which evidently succeeded. After consciousness was restored, the white of egg, mucilage, and warm milk, were administered; hot fomentations to bowels; opiate; swallowing pieces of ice occasionally; leeching the epigastrium and applying sinapisms to the spine; beef-tea by the mouth, etc.

The artificial respiration, assisted by the galvanism, seems to have done the most towards resuscitating the patient. The author is inclined to recommend ammonia, instead of alcohol, in treatment, as the latter is prone to add still further to the excess of carbon in the blood, the effect of chloroform poisoning, for it (the chloroform) seems to resemble extreme drunkenness.

The smell of chloroform in the respiration not being present, forty minutes after taking it, *and* being present when the patient commenced to rally, seems to look to its extreme rapidity of absorption, and its presence in the bowels; hence the propriety of the black draught to operate upon them. The same author speaks of the only case of the kind he ever saw, in which a man swallowed *six ounces of chloroform*, but recovered from the immediate effects of the drug by galvanism and artificial respiration, "but died in forty-eight hours, in great agony, with symptoms of acute gastritis." The poison from chloroform he compares to that of opium, but remarks that "the diminution of the frequency of the respiration was not proportionate to the amount of stupor." A case is quoted from Mr. Lowe, from the same source, in which a patient having inhaled chloroform was saved by artificial respiration, when the pulse and respiration had been arrested for *four minutes!* Another case of fatal poisoning by chloroform, with the post-mortem, is so interesting I am induced to quote; it is from Dr. W. P. Bain, Surgeon to the Poplar Hospital, reported in the *London Lancet* for June, 1859, p. 507.

The Dr. was called at 7 A.M. on 27th October, to see Mrs. D.; found her insensible, head resting on her breast, countenance of death-like paleness; mouth open, eyelids half closed, eyes turned up, pupils slightly contracted, and scarcely affected by light; pulse 84, moderately full; breathing abdominal without stertor; surface and extremities warm; total insensibility. A bottle labelled "chloroform," and found in the room, furnished the clue to the cause of the symptoms. Water injected into the stomach by the pump was soon rejected, tinged with bile; sinapisms were applied to the neck, chest, and feet; continued insensible and motionless for many hours, with the exception of periodic vomiting, which took place with difficulty; respiration being stopped for half a minute, until a prolonged stertorous inspiration would be taken, when the respiration would be resumed with its former regularity; these attacks becoming more infrequent until 1 P.M., when the eyelids would move upon irritating the eye; pulse 100. At 3, more sensible, pulse 100; forearm and fingers livid-looking, and inclined to be cold; feet warm; vomited a large quantity of bile. Six P.M.; pulse 120; answers questions; great tenderness in the epigastrium; fæces and urine passed involuntarily; *the odor of chloroform very strong in the breath.* Half past 10 P.M.; pulse 160; skin warm; no headache; thirsty, and still inclined to sleep.

Says—In consequence of trouble, she arose at 3 A.M. and mixed a wine-glassful of chloroform with an equal quantity of water and swallowed it, and retired to bed.

As the narcotic effects of the chloroform had passed off, effort was made to subdue the acute gastritis set up by its corrosive action.

Effervescing and acid drinks were given, counter-irritation, anodynes, etc., employed for a week; she exhibiting all the symptoms of acute gastritis, and dying on the eighth day.

The amount of chloroform taken was undoubtedly, from the best information obtainable, correctly stated. Thirty-six hours after taking the chloroform, the smell was perceptible in her breath.

Post-mortem, forty hours after death. I will quote only the appearances of the stomach.

"The surface *of stomach* much congested, and it was much contracted about the middle portion, forming two distinct pouches; when opened, an escape of gas, possessing a very ammoniacal smell, took place; the internal coats were highly inflamed; the rugæ of the depending portion larger than usual, and very pulpy; the mucous and muscular coats for about a circle of two inches in diameter near the cardiac orifice, were entirely eroded, the peritoneal only remaining on its surface. The surrounding parts, on the contrary, were deeply vascular; perforation had also taken place near the pylorus." "The chief points of interest in this case, are the large quantity of chloroform taken, without causing speedy death; the long time (about twelve hours) of total insensibility; the permanence of odor in the breath; and the entire absence of head symp-

toms on the recovery from the quasi-intoxication. It is not improbable but that she would have recovered had the chloroform not been taken on an empty stomach undefended from its erosive action."

Dr. Corrigan (*Braithwaite's Retrospect*, Pt. 31, p. 262) speaks of a case in the *Dublin Hospital Gazette*, Nov. 15, 1854, in which four drachms and a half of chloroform were taken by mistake, by a man just recovering from a debauch, and having delirium tremens. The result was a perfect cure of the disease, without any pain or burning at the stomach; the sleeplessness, which had been so persistent a symptom, being entirely removed by the dose.

Joliffe Tufnell, Esq., in the Dublin Hospital Gazette, February 15, 1855, p. 19, in an article "On the Use of Chloroform in Delirium Tremens," says: "I have no fear of its use internally. I have employed it to a degree that may startle those who have had not much experience of it. I have, in a case of traumatic tetanus in the City of Dublin Hospital, kept a young man, aged eighteen, under its influence for nine days and nine nights successively, during which time he took a quarter of a pint by the mouth, and a pint and a quarter were evaporated closely over the nostrils, carrying him in a state of unconsciousness through this fearful disease, and restoring him to perfect health."—*Braith. Ret.*, Pt. 21, p. 72.

The conclusion of all this, manifestly is—chloroform may be taken, even for medicinal purposes, in very large doses, without destroying life from its narcotic properties; and if care be taken not to administer it on an empty stomach, or to sufficiently dilute it with some bland vehicle, as mucilage, gruel, etc., all risk of producing gastritis by such administration is avoided. I never have heard of a case in which chloroform, taken internally, has destroyed life by its narcotic properties (vide the case before referred to in which six ounces were taken, death resulting from gastritis only).

I do not know that the gastritis requires more than general principles to guide us in its treatment. The narcotic effect of the chloroform seems to be managed best by artificial respiration, galvanism, emptying the stomach by the stomach-pump, removing the contents of the bowels (for at least two cases I have reported seem to show that the chloroform may pass soon to the bowels and remain there until absorbed, as evinced by the absence of smell from the breath a few minutes after taking the poison, and its subsequent appearance upon unloading the bowels). Ammonia seems to be preferred to alcohol as a stimulant, as it does not seem to increase the amount of carbon in the blood, as is the case with the latter; which is especially caused by chloroform poisoning.

Coffee has been used in some of the cases reported, but I do not *know* that it can be regarded as an efficient antidote to chloroform.

A New Use for Pine Wood.—Mr. Pannewitz, of Breslau, has discovered a method by which a species of flannel is made from the fibres of pine leaves, which is now exclusively used in the hospitals, prisons, and barracks of Breslau and Vienna for bed-coverings. The flannel thus made has the advantage of driving away all insects; it serves for stuffing as well as horse-hair, and costs but one-third of that article; it will make all kinds of garments, which are of great durability and comfortable warmth. The liquid from the manufactory is now used as a medicine, and the refuse of the works makes the gas by which they are lighted.—*Medical and Surgical Reporter.*

Original Lectures.

SCROFULOSIS AND TUBERCULOSIS.

BEING A LECTURE BEFORE THE CLASS OF

THE JEFFERSON MEDICAL COLLEGE.

Session 1866–7.

By S. H. DICKSON, M. D.,

PROFESSOR OF THEORY AND PRACTICE OF MEDICINE.

Part I.

I shall treat of these subjects together; for although I do not believe them to be identical, as is strongly maintained by many prominent pathologists, still at times it is almost impossible, even by abstract reasoning, to separate them. The majority of pathologists regard tuberculosis as the same thing as scrofulosis, under special circumstances and in special localities.

I think we are bound to separate them; and I think we can do this as readily as we can separate purpura from scurvy, or the various forms of typhic fever, if we fix our attention upon the prominent circumstances belonging to their history. Of scrofula, we know its mode of causation; we understand how it has gradually become so extended. Of tubercle, I believe with Williams we do not know its cause; it comes upon us under the most inexplicable conditions, under contingencies which give us no explanation. Scrofulosis is of self-development, always, necessarily; no one becomes scrofulous suddenly, no more than one becomes base suddenly (*nemo repente fit turpissimus*). Tubercles may be developed in any one of us during the progress of a typhoid fever, as reported by Bell of Glasgow and others; and any one of us may fall into consumption at once, without any preliminary warning of changes in condition and constitution, as far as we know.

So slowly is scrofula developed, however, that I do not believe that it is ever developed in one generation; I believe that preparation is made in one generation, and the development is completed in another; the fathers eat the sour grapes, and the teeth of their children are set on edge. Again, tuberculosis is not itself without deposit; we know nothing of it any more than we do of dropsy before we have the exudation or deposit, or cellular metamorphosis; it is not itself without the tubercle, whose presence is essential. Not so with struma; there is nothing special, no peculiar deposit necessary, in a scrofulous case. Therefore I warn you against adopting too readily the doctrine of the identity of scrofula and tubercle. Examine the subject for yourselves, and decide accordingly. In the admirable work of Prof. Flint of New York, to which I have often referred you during the present course of lectures, the doctrine of identity is taught. I regret it very much; but I have to differ from him entirely as to the identity of a scrofulous cervical gland and a tuberculous deposit. He speaks of the cervical gland as showing you the changes which go on in tubercle; but there is no tuberculous deposit in a cervical gland. Lloyd tells you very well the changes that occur; there is hyperæmia of the gland; it is always an inflammatory gland. Prof. Flint himself says tubercle is often deposited independently of inflammation. Now, no cervical gland ever enlarges without inflammation; it becomes sore, it becomes red, and by and by it suppurates.

Vogel and others tell you that scrofulosis, tuberculosis, and typhosis, are deposits of matter, of an exudation or metamorphosis of cells, whatever they may be, identical with each other. Vogel says they all consist of what

he calls an amorphous struma, with earthy salts, a certain amount of fat, and a certain amount of cholesterine. There is no such deposit in many seats of inflammation in scrofulous disease. That such a deposit takes place in the lung, and wherever you find tubercle, I do not doubt. In the vast majority of cases of typhoid fever, no such deposit is clearly seen; and when it occurs the patient may die, and not by tubercle. These are views that are new to myself, views I suggest for your consideration. Is there such a thing as separate typhosis? I once believed there was, but I am now inclined to change my belief, as Woodward did not find it in typho-malarial intestines. You will not find it unless there is tuberculous deposit; and this is tuberculosis itself, as much so as tuberculosis of the lung.

This subject is open for inquiry, and will enrich research. There is no appellate jurisdiction which shall force us to settle a question; we are in search of truth, and every new fact gives us a little more light. The discovery of the stereoscopic examination of objects is an important one; we see two sides of the object at once. Now we are beginning to look at all subjects stereoscopically as well as microscopically, and see two or three sides of the object at once; we have made a great step in the path of science. We have the opportunity of reading the beliefs of men of science always opposed to each other; thus we are liable to learn those truths which cannot be controverted. In investigating this subject, let it be first decided what tuberculosis is? What is it? There is the greatest difference of opinion on this subject. One writer says that it is a nucleated, another a non-nucleated corpuscle; another says it contains molecular granules, another says it has none. Microscopists of equal ability differ on this point; one tells you it consists first of grey matter which gradually degenerates into the yellow; on the other hand Robin says the grey matter is not properly tuberculous at all, but a cytoblast; while Virchow says it is a metamorphosis of a cell, and not a new growth at all! Scrofulosis is identical with what form of tubercle?—the grey? the miliary? the yellow? the fatty? the albuminous? I make these observations to show there is a real difference between the two, closely as they are allied. I have no question that tuberculous deposit is a little more likely to take place in the strumous constitution, but not a great deal more. Flint himself tells you that tubercular consumption is not of more frequent occurrence in those marked by the inflammation of the cervical glands, who have suffered from scrofula in their youth, than in those who have not suffered in this way. This cervical inflammation is one of the clearest marks of scrofulous tendency, diathesis, constitution; and yet he tells you that tubercular consumption does not occur more frequently in them than in others. Nay, you find those who believe it occurs less in subjects who have suffered from inflammation of the cervical glands. I am of this opinion. The late Dr. Parrish of this city hailed the appearance of swelling of the cervical glands as one of the means of added security in such subjects, from tubercular consumption: given the disposition, it had better take this mode of manifestation than the internal. I have lived long enough, and have had generations enough of patients under my care, to be satisfied that Dr. Parrish was right. Those who have suffered from inflammation of the cervical glands in early youth are rather less liable than those who have not, *ceteris paribus*. I am certain that the ordinary marks of inflammation about the neck, as left in the well known cicatrices, are far less frequent now than when I began the practice of my profession. I don't speak of light degrees of the disease. I have in my note-books records of many cases, and in my memory a long list of cases of inflammation of the cervical glands of great intensity, great swelling eventuating in suppuration, and which I had to open frequently. How few of you are thus marked! The same number of individuals could not have been collected forty years ago without a considerable portion with manifestations clearly enough of having had these inflammations. Now, while these cases have been diminishing in frequency, tubercular consumption has increased in frequency; and the records I have examined show that, with us at least in this country, it is a disease of progressive mortality. Look at the rates of mortality in this city. In Prof. Wood's book on Practice, in one of the earlier editions, he alleges the influence of cod-liver oil, and states that there had been a diminution of the number of cases of tuberculous consumption upon the bills of mortality, corresponding with the increase in the use of that oil. He spoke the truth. It was a coincident which is rather remarkable, and is quoted in the last edition of Aitken as a permanent fact. I have taken pains to collate the facts. The use of cod-liver oil has gone on, perhaps increased; it is now used as largely as ever, and yet the number of deaths from consumption has gone on increasing steadily. The annual mortality stated in the edition of Prof. Wood's Practice referred to, was rather less than nine hundred; last year it was more than two thousand; and thus it has been for the last four years. Look at the bills of mortality for yourselves, and you will see that there has been a steady increase of the disease. I think Bennet and others maintain that it has decreased in Great Britain. I am willing to allow this, and am glad that it has so happened; but is the identity in question to be explained by this subsidence of consumption? Scrofula, they say, has also diminished. Aitken affirms that this is due to the influence of vaccination. Small-pox was a great developer of the scrofulous diathetis; and this being nearly broken down by vaccination, scrofula has become less prominent in a corresponding degree in that country. If this be true, I am very glad of it; and it does appear to be true. It also appears to be true that in the meanwhile there has not been a very great diminution, but still some diminution in the cases of consumption. I do not think this diminution is really greater than can be accounted for as a result of the nicer discrimination in diagnosis made at the present day with the use of the stethoscope and other careful means of physical exploration. Phthisis is now put under one head, bronchitis under another, and other affections of the lungs under their appropriate heads; different affections all classed formerly under the general head of consumption. So far as I can infer, really looking for the truth, all the difference in favor of our brethren in Great Britain may be accounted for in this way. Nevertheless, what I am saying to you is intended to be suggestive, rather than dogmatic. I don't wish to instil opinions in those who hear me. I desire you to think for yourselves; it is responsibility enough for me to bring before you what I think is true, without endeavoring to indoctrinate you with my own views.

Tubercular consumption is the greatest outlet of human life. If connected with scrofula as effect of cause, it is of the greatest importance to remove the cause, to remove the predisposition, which will extend; and among the causes pathologists generally hold scrofula to be. I will not deny that degree of connexion, though I deny their identity.

The investigation of scrofula affords us one of those remarkably instructive methods of study in which we take a course opposite to that generally pursued in examining disease; and instead of deriving general or constitutional disease from some local change of the

same kind continuing, we are obliged to refer the local changes to some general or obscure condition of constitution which we call scrofulous diathesis, the occult state of causation we call struma; when it manifests itself in any particular way, it is usually with some modification of inflammation, and we call this scrofula.

No organ seems to be free from this diathesis; whether it is in the blood or in the harder tissues, is obscure. I do not think we are ready for this question as yet; it is impossible to say whether the existence of the *materies morbi* in the blood has been proved undoubtedly. Coleman transferred scrofulous blood from a diseased animal to a healthy one, and the healthy animal became scrofulous. He took animals of different orders—the horse and ass—and found the disease transmissible by the blood. Tuberculosis is equally inoculable. Klenke, and later Lebert of Breslau, and Villemin, have been successful in inoculating with the tubercular matter from consumption to the lower animals, and from one animal to another; the disease being propagable both by the blood and by the deposit. In all these cases of occult diathesis, as in gout, carcinoma in scrofula, it may be a very important matter to know, and we shall know by and by, whether the original germ is transferred in the solid or the fluid form; whether it is the blood that circulates which conveys the disease, or whether it is the solid tissues which help to form and modify the blood. Probably both are concerned.

In the young child born of parents who have transmitted to it this peculiarity, we find that the very first movement of life will be marked by changes of condition. We have in Mr. Lloyd's Museum in London, two fœtuses with tubercles of the lungs. If this be proof of scrofulous deposition, we have the proof of development of scrofula in that form; but we find that these children are born with diseased skin, affections of the scalp. Soon the eye becomes affected, the lid especially, which is thickened and roughened. This we call scrofulosis. After a while there is rachitis, mollities ossium; this is called scrofulosis. It occurs in the children of parents who live in certain circumstances unfavorable to the proper development of animal life. As you go on, you find certain other affections; the heads of the bones swell and inflame—white swelling; the joints are swollen in this way. The child early shows, perhaps, spina bifida. I have seen a child under these circumstances with cleft palate, hare-lip, hydrocephalus, spina bifida, hypospadias, deformity of the genitals, all combined, and still the miserable little infant continued to live. The parents were scrofulous, and probably all these conditions concurred to the production of this universally morbid development of the child. This we call scrofulosis.

Of the three similar cachexiæ, typhosis, tuberculosis, and scrofulosis, we may regard typhosis as the most acute, tuberculosis as intermediate, and scrofulosis as the most chronic.

M. Jean Dollfus, a manufacturer in Paris, observing that the children of his workwomen died more rapidly than other children in the proportion of 40 per cent. to 18 per cent., came to the conclusion that it was due to compelling the attendance of the mothers at the manufactory too soon after their confinements; that thereby they were not allowed sufficient time to attend properly to their children during their early existence. He therefore allowed them to desist from labor for six weeks following confinement, instead of four weeks, as had been the rule previously, and this brought the proportionate mortality down to 25 per cent. His example has been imitated extensively throughout France, and the result has been that the mortality among the children of such operatives has been greatly diminished; still it has not been reduced below the proportion of 25 to 18 of the general mortality.

We know that manufacturing communities in England suffer variously from scrofula; we know that their children grow up rickety, scrofulous, deformed, disabled in many ways. Good says there is no difficulty in explaining the existence of scrofula under these conditions: They are not particularly well fed; they are not very well sheltered, they are not very well clothed, and they are set at labor too early. It is not long since the British Parliament enacted a bill preventing the employment of children at too tender an age. Children of six years of age were employed at labor, and still are, in spite of the bill, in certain branches of industry. We learn this state of things from many sources, for it has been made the theme of poetry, of works of fiction, novels, etc., as well as all medical works; and, indeed, we can often learn much professionally instructive from such works; we learn that they are employed even when in bad health. Read the sad tale of "Simon's Sickly Daughter," sad enough to make any one's eyes weep; poor fellow, he takes his sickly daughter on his shoulder and carries her to her work, for she, too, must add her little mite towards her own support.

Under such circumstances we can understand how all the people shall become scrofulous.

Young says the whole of Great Britain is scrofulous, and he attributes it to climate; but there is something in race too. The Chinese suffer as much from ochlesis, and in many parts of their country, as much from imperfect nutrition as the English, but we do not hear of scrofula as prominent among them. The blacks in Africa suffer variously and capriciously; sometimes from famine to a great extent. Famine, we know, pervades all India at the present moment, thousands dying weekly in Hindostan. They also suffer under all the circumstances, except climate, which in Great Britain produce universal scrofula, yet they are not so subject to it. In this country we do not suffer from ochlesis except in the cities; we do not suffer from want of clothing, food, or shelter; our children are not overworked in manufactories; our laborers live well, and are in every way in a better physical condition than the laborers of Great Britain; and yet scrofula is extensively met with among us. I have said that it has diminished much within my own knowledge; it goes on diminishing on account of the increased comforts, the better hygienic conditions which science in the service of health is providing every day; still there is scrofula among us.

Knox ascribes it to our remarkable hybridism; and thus we are led to consider another cause. Unquestionably hybrid races are very generally an improvement on the original races, but it must be congenial hybridism; there is a congenial and an uncongenial miscegenation, and certain races when they mix deteriorate as much as other races improve. We improve our breeds of cattle, horses, etc., by proper crossing, and so the human animal in its various tribes can be made to improve by an appropriate crossing; but there is a certain deterioration in the mixture of certain races which we can trace with ease. The Scotchman, healthy and hardy, perhaps the hardiest specimen of the human species, mixes very readily with the Indian on our frontiers, but it is an absolute fact that their offspring are all scrofulous and consumptive. Osceola died of consumption. He was the product of a healthy Indian woman and a Scotchman. The Ridge family had morbus coxarius and other scrofulous disorders, and finally consumption; and thus I could trace numerous instances which have come within my own immediate knowledge. I believe that hybridism between the Scotch

and Indian produces almost always a scrofulous race. Not so with the Frenchman and the Indian. The French, from the South of France at any rate, mingle with the Indian, and not badly with some of the better races of Africans; hence we have our octoroons, our quadroons, as comparatively healthy; but the mulatto is always liable to scrofula. As Nott says, he can never keep up his numbers; he will deteriorate, and especially by scrofulous degeneration. I speak from large observation, and say it deliberately, that I am ready to indorse all that he has written on this subject. The Portuguese in the island of Madeira mixed with the Indian or Malay, and the negro; the result has been a most miserable race, wretchedly degenerate in every way, and liable to scrofula. We know the degeneracy of the mingled races in Mexico, but whether they are scrofulous or not I am unable to assert; but we know as a fact that they are exceedingly degenerate, and among the common degenerations of the human race scrofula stands foremost.

Progress of Medical Science.

Cautions in Regard to Use of Sphygmograph.—Out of the facts detailed, as to the changes in the pulse-curve which are produced by physiological influences that are in daily operation, the following cautions arise as to the time at which sphygmographic observations should be taken:—

1. Sphygmographic observations must never be taken within two hours after a solid meal, like dinner; one hour after breakfast; or fifteen minutes after the ingestion of any alcoholic drink. The traces obtained during the temporary disturbance consequent upon either of these are entirely worthless as a representation of the real condition of the organs of circulation. 2. Observations must never be taken during a state of bodily fatigue from exertion. 3. Observations must not be taken when the patient is under cardiac excitement caused by muscular exercise. 4 Observations must not be taken when the patient is flushed with heat from external sources. 5. Observations must not be taken while the patient is under the influence of sudden emotional shock.—Dr. Anstie.—(*Lancet*, Feb. 9.)

Temperature of Body in Cancer.—Dr. Da Costa, of the Philadelphia *American Journal of Medical Science*, recently presented to the Pathological Society of that city a case of cancer of the stomach in which the temperature of the body was below 100° F., notwithstanding progressive and rapid wasting. Believing that this fact had a significance beyond this individual case, he remarks:—"It is known that in tubercular disease the thermometer indicates a heat much higher—a fever temperature. Shall we find it the rule, that cancerous affections show a comparatively low temperature? If so, many a doubtful differential diagnosis between cancer and tubercle of internal organs will cease to be doubtful. Dr. Da Costa has thus far four observations bearing on this point. In a case of cancer of the liver under his charge at the Pennsylvania Hospital, and which terminated fatally, the evening heat was never but a fraction above 99°; in a case of cancer of the mesenteric glands, of which the temperature was taken carefully by Dr. Edward Smith, it did not exceed 98°; in another case of internal cancer, it did not reach 100° F."

The Ligature of Veins (the Internal Jugular) not the Cause of Pyæmia.—Dr. S. W. Gross, in an article on Wounds of the Internal Jugular Vein, and their Treatment (*Amer. Jour. Med. Sci.*), thus speaks of the safety of the ligature:—

"After a very careful examination of the whole subject, I do not hesitate to state that the occurrence of pyæmia, when of traumatic origin, is due to the wound of the vessel itself, and not to the ligature; that a predisposition to the disease, or rather a peculiar morbid condition of the blood, is necessary for its development; and that when that predisposition exists, the affection may show itself whether the vein has been tied or not; in other words, when the coats of the vessel are healthy, and the condition of the blood is normal, the ligature is never the starting-point of pyæmia."

Injection of Acetic Acids in Cancerous Tumors.—The novelty of the past two months is the injection of acetic acids in the substance of cancers in order to secure their removal by absorption. The plan is brought forward by Dr. Broadbent, a physician who is thought highly of in London. It suggested itself to his mind in consequence of the known solvent powers of this acid upon cancer cells as seen under the microscope. Dr. Broadbent recommends that about forty drops of a mixture of one part of acetic acid with five or six parts of distilled water should be injected into the cancer; the point of the syringe being thrust (subcutaneously) into different parts of its substance during the operation, so that the agent is well disseminated through it. The injection is repeated at intervals, varying from five to ten days or longer according to its effects. The method is now being extensively tried, and many cases are reported in which large cancers have been completely and almost painlessly removed. Its true value can by no means be pronounced upon at present.—*Foreign Correspond. Southern Journal Medical Science.*

The Cause of Dental Caries in Married Women.—Dr. J. P. H. Brown, Augusta, Ga., remarks (*Dental Register*) upon this subject as follows: "The teeth are governed, in proportion to their vitality, by the laws of disintegration and reparation, like any other portion of the system. This explains why the teeth of many females, after marriage, decay so rapidly. They enter the marriage relation with so little life-power that, when they become pregnant, they have not sufficient vitality to appropriate to the tooth-germs of the fœtus enough of the inorganic elements from the food to form healthy dental tissue. In such cases the demands of the fœtus upon the mother for phosphate of lime, leave her osseous system in a weak condition. The teeth also furnish their quota of lime, but as their power of reparation is very feeble in comparison to the more vitalized structure of bone, they are left constitutionally depraved, and ill prepared to resist the chemical action of the vitiated secretions of the mouth. Hence it is that the offspring of such mothers have teeth of so frail a quality, that the best and most skilful operations upon them can prove of only temporary benefit."

A New Food.—Mr. Hullett calls attention to the value of Chinese sugar-grass (*Sorghum tartaricum*) as a valuable addition to our cereal crops; it bears six or eight times the quantity per acre that wheat does, makes capital bread, whilst the leaves and shoots are good for cattle.—*Lancet.*

Bronchocele treated by Strychnia.—Dr. C. Mann (*Cincinnati Journal of Medicine*) reports a cure of this affection by the administration, internally, of strychnia. This in a measure confirms the practice employed some years ago by Dr. Murner, of Dublin.

To make Beef-Tea Nutritious.—Let the cook understand that the virtue of beef-tea is to contain all the contents and flavors of lean beef in a dilute form; and its vices are to be sticky and strong, and to set in too hard a jelly when cold. When she understands this, let her take half a pound of fresh-killed beef for every pint of tea she wants, and carefully remove all fat, sinew, veins, and bone. Let it be cut up into pieces under an inch square, and set to soak for twelve hours in one-third of the water required to be made into tea. Then let it be taken out and simmered for three hours in the remaining two-thirds of the water, the quantity lost by evaporation being replaced from time to time. The boiling liquor is then to be poured on the cold liquor in which the meat was soaked. The solid meat is to be dried, pounded in a mortar, and minced so as to cut up all strings in it, and mixed with the liquid. When the beef-tea is made daily, it is convenient to use one day's boiled meat for the next day's tea, as thus it has time to dry and is easiest pounded. Some persons find it more palatable for a clove of garlic being rubbed on a spoon with which the whole is stirred.—"*The Indigestions*," *by Dr. Thomas King Chambers.*

Novel Method of dealing with Ligatures applied to Arteries.—Mr. Campbell de Morgan has been adopting of late, at the Middlesex Hospital, a plan of dealing with ligatures applied to vessels during a cutting operation, which merits notice. When the vessels have been tied, instead of following the usual custom and leaving the ligatures hanging out of the wound, Mr. de Morgan, by means of a needle, passes them through the skin close to where they are tied. They remain quite quiet, and come away without the slightest pain or trouble when their work is done. The wound consequently has nothing to irritate it, and enjoys every opportunity of healing by the first intention. The plan leaves the parts as quiet as if a compressure had been applied. There is now in the hospital a case in which Mr. Moore tried the method at Mr. de Morgan's suggestion, on Wednesday week, after removing a breast.—*Lancet.*

Ventilation for Invalids.—Dr. Thomas Inman (*London Medical Mirror*) thus alludes to home ventilation: "When speaking of airiness, I do not mean individuals to encourage draughts of cold air about their persons, nor can I recommend them to do as a medical friend of mine is said to do, viz. open the windows of the bedroom at night to get the fresh country air, which the town smoke vitiates during the day, so as to make it too impure for use. There may be differences of opinion on the subject amongst those who observe little; but amongst those who do, the belief is entertained that warm air moderately impure (as in a closed bed-room where two or more are sleeping), is less noxious to the invalid and those whose health is shaky, than is cold air and absolute purity. The purity does not counterbalance the effect of the chill."

Postural Treatment in Prolapse of the Funis.—This method, suggested by Dr. T. G. Thomas, of this city, has been favorably reported upon in England. One writer, however, objected to it, in a note to the *Medical Times and Gazette*, as being applicable only to cases occurring among the poorer classes of patients. To this objection Dr. Dyce makes a very sensible answer, and quotes the reply of Napoleon the Great to Dubois, when the life of the Empress Maria Louisa was in danger: "Forget the empress's station, and treat her as you would a soldier's wife." Dr. Dyce also ascribes the want of success of the previous writer, to the fact that the manipulations were made during a pain, whereas they should have been made in an interval. Two other successful cases are then alluded to.

Post-Mortem Appearances in the Syphilis of the Lungs and Intestines.—Man, thirty-six. Acquired a chancre about four years before death. Was especially affected with eruptions and ulcers. Had been treated with various anti-syphilitic remedies; for a great part of the time in a hospital; fifty-four ulcers from two lines to two inches long were found in the small intestine. The base of the ulcers contained black pigments. Some of them were granulated. In isolated cases radiated fibrous cicatricial formations were also seen on the black base of the ulcer. Small, tough fibrous granules were found upon the surface of the ulcer, corresponding to the serous membrane of the intestine, which, as well as the muscular coat, was found hypertrophied. The ulcers were exclusively found in the small intestine, and extended downwards to the *valvula Bauhini* (ilio-cæcal valve). The mucous membrane of the duodenum showed the marks of chronic inflammation; great vascular injection, and hypertrophic swelling. The mucous membrane of the stomach exhibited enlargement of the vessels, considerable thickening of the pylorus; there was atrophy of the margin of the liver, the parenchyma was pale. The constituent granules (*acini*) were pigmented in the centre. Spleen softened. Pleuritic effusion on the right side, with fibrinous pseudo-membranous deposit. Right lung; carnification of the lower lobe; œdema and pneumonic infiltration of the two upper lobes. A few soft nodules, about the size of a hazel-nut, of a homogeneous gelatinous nature, were found in both the œdematous and infiltrated portions, which seemed analogous to gummy tumors.—*Meshede, Virchow's Archiv.—Med. Central Zeitung.*

Ether Spray Process as an Aid to Diagnosis.—Dr. Edward Hayward, of London, recommends the use of ether spray as a means of diagnosticating tumors. The recommendation is based on one case of an obscure affection of the right hand and forearm of a married lady of forty. The symptoms were those of a neuralgic affection of the ulnar nerve, accompanied by the tingling of the hand and forearm, with contraction of the fingers supplied by that nerve, and a tenderness more or less over the region. A peculiar indefinite swelling was observed above the elbow-joint, and where the ulnar nerve rests on the inner head of the triceps muscle, and before it reaches the groove between the internal condyle of the humerus and the olecranon. There was pain on pressure, accompanied by numbness of the hand and great tingling of the fingers. It was thought that the symptoms were due to sequelæ of rheumatic disease, causing pressure. Ether spray was used to relieve pain, with great benefit; it softened the skin, the whole of the structure came under the fingers, softened like kneaded dough, and we could thus take up the tissues, inch by inch, between the fingers, and say there was no cyst and no tumor. Ether spray was continued, with painting the surface with tincture of iodine and oil. It did well.—*Med. Times and Gazette.*

New Form of Antiseptic for Local Use.—The *liquor carbonis detergens* is recommended. It is an alcoholic solution of coal-tar, containing, we presume, the carbolic, phenic, and other acids, with dark tarry matter, and differing from carbolic acid, as the liquor cinchonæ does from quinine. It readily mixes with water, forming a permanent emulsion, and in various strengths is available as a mouth wash, a gargle, an injection for fetid uterine discharges, cancer, retained placenta, etc., gonorrhœa in the female, foul ulcers, sloughing sores, and all maladies dependent in or complicated by parasitic beings, lice fungi, etc. It is also used combined with soap.—*Med. Times and Gazette.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—ROSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, April 1, 1867.

THE MORTALITY ATTENDING WET-NURSING.

IN the previous number we took occasion to remark upon the effect which the prevalence of criminal abortion had upon the decrease of our own people. The report upon which these remarks were in the main founded, was sufficiently full as to details to give rise to a good deal of concern among those interested in the natural growth of population. But there is another act to this grand social drama which, though not startling us with the appalling enactment of premeditated murder, is not on that account the less worthy of consideration; we refer to the prevalent and fashionable practice of nursing by proxy.

When we undertake to deplore the comparative paucity of children, we should not allow ourselves to stop here, but should put the question—What proportion of even these few little ones receive that careful nursing which they are entitled to? No one can answer this except approximately; but allowing for all extenuating circumstances, every practising physician knows full well that the present system of neglect of nurslings is frightfully prevalent. The fashionable mother now finds something else to do besides tending her offspring, and the real excuse is not so much on account of delicate health or physical incapacity, as want of time, and a disposition to shun that care and anxiety for the welfare of her infant which she should feel, as well as a desire, laudable enough in the abstract, to preserve her beauty of form and youthful face. This is one extreme; another is to be found in the mother less favored by fortune, who, nevertheless, is actuated by a desire no less deplorable—that of gain—and consents to hire out the nourishment of her own offspring to that of another. It is to these two classes principally—the one creating the demand and the other furnishing the supply—that the prevalence of wet-nursing is due.

The subject of wet-nursing, in its direct relations to the mortality of nurslings, has been lately attracting attention in the Imperial Academy of Medicine of Paris; and the discussions which have grown out of several documents presented to that body, as well as the documents themselves, have proved of value in associating the two in the light of cause and effect. The first paper was by Dr. Monot, who, in a report upon the great mortality among the new-born infants of the old province, Morbihan, maintained that such was the consequence of its young women leaving their homes and infants, to sell their milk in Paris. Dr. Brochard, who followed, charged the great mortality of the children of Normandy to the fact, that the majority were those taken from Paris to nurse.

Perhaps the paper which had the most weight and best succeeded in presenting the naked truth, was the one read before that learned body, on the 23d of October last, by the Honorable Armand Husson. This document, by the kindness of Dr. Seguin, is now before us, and invites a comment or two in respect to the bearing it may have upon the customs of our own people.

The writer begins by establishing the general mortality of French children, from one day to one year old, at one-sixth.

Thus Distributed:	Birth.	Death.	Per-centage of death.
City Population.....	249,847	45,766	18.32
Rural Population.....	672,857	121,045	17.96
Total.....	922,704	166,811	18.21.

This table shows that the mortality is less in the country at large than in towns, but only in the proportion of 0.34 per 100, owing, likely, to the number of town children sent out into the country. The same cause working on a larger scale, and conversely, shows a mortality of only 16.30 per hundred for the city of Paris, whereas the same mortality is as high as 17.98 per hundred in the surrounding country. The reason for this difference is an all-powerful one, when we learn that out of an annual registration of 53,335 births, Paris sent away the enormous number of 18,000 children to be nursed by strange mothers, these, for the most part, living close by and in a circumference of 30 miles. Again; in the arrondissement of Nogent le Rartoux, the deaths among the nurslings from Paris amount to 35 per 100, whereas for those children born on the spot it is only 22 per 100.

In order to show that this mortality—due to indifferent and careless nursing—is on the increase, he ascertained that from 1839 to 1858, the mean death-rate of the same children, from a day to a year old, was 29.71 per 100; then, from 1858 to 1864, it went up to 33.93 per 100; in 1862 it was down to 30.02 per 100, and in 1864 it increased to 40.07. It is true, that these children, furnished with nurses by the Government, were not born in the best conditions of vitality, but the conditions of their births were virtually alike every year from 1839 to 1864.

On the other hand, for the foundlings of the City of

Paris, placed and cared for by the administration, their mortality has been, from 1830 to 1858, 55.88 per 100, and was reduced gradually in 1864 to 39.26 per 100. Remarkable decrease indeed, showing a great amelioration; though presenting yet a mortality more than double the average one of the whole empire.

But this improvement, at this centre, does not hold good for the departments, where the death-rate among foundlings has been fearful, as shown in the following enumeration:

The mortality per hundred of the foundlings from one day to one year old in the departments of Loire Inférieure, was 90.50; Seine Inférieure, 87.36; Eure, 78.12; Calvados, 78.00; Aube, 70.27; Seine et Oise, 69.23; Côte d'Or, 66.46; Indre et Loire, 62.16; Mauche, 58.66.

The departments which present the greatest mortality are shown to belong to old Normandy, a country neither poor nor ignorant; and the inference is a fair one, that other causes than poverty and stupidity must combine to destroy these children. The three departments where forced labor, misery, and crime, are joined hand in hand; the Seine with Paris; the North with Lille, Roubaix, and Valenciennes; and the Rhone with Lyons; present only a mean mortality of the same children as 38.17 per 100.

In Great Britain substantially the same state of things exists, as has been shown to be the case in Paris; in fact, it is acknowledged by statisticians that all over Europe wet-nursing is a villanous scourge.

If we, in the contemplation of this subject, return to our own country, and view the cause of infant mortality in the same light and in the same manner as has been so ably done by M. Husson and others, we shall find that our large cities are not behind Paris or London in the extent to which the practice of wet-nursing is carried on. We doubt not, if the truth were told, that we should find that New York, Boston, Philadelphia, and other centres would, in proportion to population, excel any transatlantic city in the number of innocent victims sacrificed on this dreadful altar of expediency.

But it is one thing to refer to the existence of an evil, and quite another thing to suggest a remedy. The physician, however, is competent to treat this question, and to do much in his own circle of practice to prevent, by his advice, the continuance and growth of the vice. He may be the means of accomplishing a good deal, and he may not; but that is no reason why every practitioner should withhold his counsel when it may be, as in these cases it almost always is, called for. He owes a duty to the rising generation which no consideration for the peculiar views of his patients should deter him from performing.

An artificial ivory is now made in France from a paste of papier-maché and gelatine, and to which the name of Parisian marble is given. Among other things, the finest and most complicated mouldings for ceilings can be made, or capitals of columns can be constructed in any color. It is said to be hard, durable, and elastic.

Reviews.

Guide for using Medical Batteries, by A. C. Garratt, M.D., etc. Phil.: Lindsay & Blakiston.

For more than ten years the subject of electro-therapeutics has been commanding the attention of some of the ablest minds of the profession in France, in England, and in Germany. In this country this important department has been almost exclusively in the hands of charlatans or outsiders, and Dr. Garratt is one of the very few of our recognised practitioners who have accorded to it anything of the attention it deserves. For a number of years he has made a specialty of electro-therapeutics, and has gained the co-operation of the profession in Boston and vicinity. For his courage and independence in the face of doubt and ridicule, for the restless zeal with which he has prosecuted his investigations in the treatment of a great variety of diseases, for his tolerant and catholic spirit that has not spurned to receive suggestions from any and from every source—for all this he is deserving of the warmest praise. But here our commendation must cease. Unfortunately for the profession, unfortunately for the cause of electro-therapeutics, and very unfortunately for himself, Dr. Garratt has written a book that has already reached a third edition, of which this work before us professes to be a "synopsis," or "condensation." The original volume was severely, but deservedly criticised, not only for its inaccuracies of style as well as of statement, but more especially for its ponderousness. This "condensation" is an improvement upon the former work in only one respect—it is shorter. From the 1100 pages of the larger volume he has simply dropped 930, leaving most of his faults as a writer as conspicuous as before. If he could only have dropped the entire 1100 pages the improvement would have been greater still. Industry alone can never make a writer. There must needs be at least some regard for the laws of grammar and rhetoric. But all these Dr. Garratt ignores.

In this volume there are jumbled together a great variety of descriptions of apparatus, of directions for employing them, and citations from learned authors on almost every department of human thought; but for any broad, compact generalizations in regard to the scientific employment of electricity, or for any intelligible rules in regard to the applications, we look in vain. His absurd and repeated violations of the simplest laws of composition, his turgid and meaningless amplifications, his *lucus a non lucendo* suggestions for practitioners, will surely cause all who are not endowed with more than usual self-control, to throw aside the volume in disgust, both with the subject and the author. We speak with deliberation when we say that the writings of Dr. Garratt have retarded more than they have advanced the cause of electro-therapeutics. Those who are already familiar with the details of electrical application may find in his larger work a verbose complication of what has thus far been attempted in this department, and may derive some assistance therefrom. But those inquiring minds who either in the original work or in the "Guide for using Medical Batteries," seek for information that may make them practical electricians, will be guided into darkness rather than into light. The subject of electro-therapeutics demands great energy, zeal, patience, and experience, on the part of him who would become proficient in it, but it is far from being as complicated and abstruse as Dr. Garratt would make us believe. We are firmly convinced that the medical use of electricity is destined to assume an importance of which its warmest advocates have at present no con-

ception; but it will be in spite of, and not by means of such works as these. In all friendliness and sincerity we urge upon Dr. Garratt to write no more; but if he must use his pen, let him condense this "condensation." Far better that there should be "silence for a century" on this subject than that there should by any multiplication of such works as "*Medical Electricity—Nervous Diseases*," or this "*Guide for using Medical Batteries.*"

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 9, 1867.

DR. FRANK H. HAMILTON, PRESIDENT, IN THE CHAIR.

DR. LOUIS BAUER presented the following specimens:

OSTITIS OF LOWER THIRD OF THIGH-BONE, AND PARTIAL DETACHMENT OF EPIPHYSIS SUCCEEDING AMPUTATION AT THE KNEE.

The patient is a lad of fourteen years, undersized, and of delicate organization, exhibiting no marks of puberty. On stepping from a ferry-boat, he missed his footing, got the lower part of his leg, the ankle-joint, and the tarsal portion of the foot jammed, lacerated, and comminuted. The attendant amputated at the knee-joint, after an inexplicable delay of five days, gangrene having supervened. The integuments appropriated for the covering of the stump sloughed away likewise, thus leaving the epiphysis fully exposed. Gradually, the stump became subject to a most intense pain, which had lasted eight weeks without cessation, when the patient came under my charge. His reduced and anæmic condition, the accelerated pulse and hectic symptoms generally, denoted continued and severe suffering. The lower portion of the stump was excessively tender to both touch and movement. The integuments surrounding the projecting bone were ragged, discolored, and œdematous; the discharge was copious, and of a sanious character; the epiphysis black, corroded, and soft, with but fragments of articular cartilage, loosely adherent. The epiphysis, moreover, was evidently loose, and might have been detached without much effort. The subcrurian bursa was slightly distended by fluid. Occasionally the stump would be shaken by spasms of the most painful character.

An early amputation of the diseased portion of the stump was deemed advisable, and the patient desired it most urgently. Whilst he was under the influence of chloroform, and being prepared for the operation, the stump was still so tender that a gentle touch produced lively reflex tremor. The amputation passed off without any remarkable incident, except that there was copious bleeding from the medullary cavity. The periosteum was but loosely adherent, and so much changed in texture that consecutive troubles of the bone were apprehended. Nevertheless, the wound closed rapidly by first intention, and the patient was about on the fourteenth day.

In viewing the specimen soon after its being removed and longitudinally divided, we found it exhibiting both hyperæmia, intensified by hæmorrhagic depositions, and hyperplasy towards the epiphysis; the reticular substance is notably densified, while the periosteum is internally covered with osseous elements—the creation of new bone. On the surface of the bone, similar rudimentary attempts are observable. The cartilaginous connexion between the shaft and its epiphysis was materially changed in thickness and consistence, being so soft as to almost allow a free antero-posterior movement. Its spontaneous separation was effected by a maceration of twenty-four hours.

The case may attract more surgical than pathological interest. The injury having been limited to the lower part of the extremity, left the thigh-bone intact. Its diseased condition accrued from the exposure of the epiphysis to the action of atmospheric air and purulent maceration, and thence it extended to the shaft. It would seem as if the amputation at the preferred point, under the preceding circumstances, was rather ill-conceived, inasmuch as the coverings of the stump had to be taken from parts in close proximity to tissues already mortified, and themselves, perhaps, more or less vitally depressed. Irrespective of this objection, however, a query arises, whether an amputation at the knee-joint, before puberty, is at all judicious? Dr. Markoe has the merit of having prominently urged that amputation on account of its statistical superiority. The cases adduced in its favor include, if I am correctly informed, two children; the closing of their stumps met with no protraction. With due respect for the accuracy and clinical skill of that gentleman, I entertain humble doubts as to the practicability of so general a rule. From my own experience, I am justified in inferring that there can be no direct union between the flaps and the articular cartilage; the latter has to undergo some prior structural changes which must inevitably protract the cicatrization. Whilst thus suppuration and the formation of granulation tissue is going on, the epiphysis is exposed to the corroding or macerating influence of pus, irrespective of the atmospheric air, and may eventually become necrotic. In its turn, secondary amputation would seem inevitable. This is merely speculative on my part, as indeed I have had but limited opportunities for watching the healing process of such wounds. But other surgeons must have had clinical experience to that effect; hence they have suggested the abscission of the articular face. Though I may not feel prepared to cope with the larger experience of Dr. Markoe, I may be justified in suggesting the revision of his arguments in favor of this operation.

FUNGOID DISEASE OF KNEE-JOINT. CARIES OF THE ARTICULATION. AMPUTATION.

The specimen, comprising the right knee-joint, may not be of great interest, as its pathological features are rather of ordinary occurrence. Nevertheless, it may serve to bring the term "fungoid disease," preferred by German surgeons, to a clearer comprehension among ourselves. The history of the case is of the usual character. The patient is twenty-seven years of age, slenderly built, delicately constituted, and a glass-blower by trade. Nevertheless, his health has been tolerably good, until he met with an accident to his articulation about three years ago. Ever since, the joint has given him trouble. But so insidiously did the disease advance, that during a part of the time he has been able to perform military service in the field, and in the Veteran Reserves, alias the "Diarrhœa Corps." Of late, however, the disease has made rapid progress, become so painful as to deprive him of rest and appetite, and consequently the patient has been much reduced in weight and appearance. About six weeks ago I took charge of the case. I found the joint but moderately flexed, at an angle of 120°, without much rotation of the leg, and eversion of the toes. The articulation had lost all its contours by distension and tumefaction. Above it, and in front, there was a large abscess, extending upwards over the lower third of the thigh. On the outer aspect there was a fistulous opening, leading to the

articular cavity. There was no other obstacle to the mobility of the joint than a moderate contraction of the biceps-muscle, and the excessive painfulness. On moving the joint, grating of bony surfaces could be discerned.

Although the case seemed to demand early amputation, nevertheless I resolved on freely opening the respective abscesses, on dividing the retracted biceps, and on placing the extremity in a proper, straight position, and to be guided by future exigencies. My reasons for this plan were to give the patient the chance, however remote, of preserving his extremity, and to give him instantaneous relief from pain, however temporary, so as to recruit his enfeebled condition, and thus prepare him for the eventuality of amputation. Moreover, the execution of the plan could be rendered, by chloroform, harmless, inasmuch as no material loss of blood was apprehended. My expectations were fully realized by the result following the procedure. The patient was indeed rendered comfortable, and enjoyed full immunity from pain for more than a fortnight. The discharge from the abscesses did, however, not improve in either quality or quantity, and after a fair trial I was impelled to resort to amputation, on the 30th ult. The patient sustained considerable loss of blood, in spite of the most rapid ligation. But two arteries required to be tied, whereas some thirty veins had to be secured; and besides that, the parenchyma oozed bloody serum freely. At one time during the operation, the patient became excessively debilitated; he rallied, however, by degrees, and is at present doing moderately well, the wound healing by suppuration. The periosteum was found to be greatly thickened, evidently caused by the extensive abscess along its course. This is probably the reason why the free incision into the joint had no lasting effect upon the condition of the patient.

The specimen presents but the ordinary characteristics. The articular surfaces are corroded, and but a few vestiges of cartilage remain loosely attached. The semilunar cartilages are changed in consistence and color, and partly destroyed by ulceration. The capsular ligament is perforated in three different places. The synovial membrane presents a condition described as "fungoid disease;" that is to say, it has undergone a transformation into cell-layers and granulation tissue, which project into the cavity, as folds and appendages, greatly infiltrated with serum. The peri-articular structure is much thickened, and pervaded with soft fat.

The terms "white-swelling," "tumor albus," and "fungus articuli," were formerly in use as synonyms. Of late, the appellation of "fungoid disease" has been adopted by German writers, not so much for the purpose of qualifying the general circumscribed intumescence of the joint and adjacent tissues, as to characterize the luxuriant growth and development of granulations that spring up from all sides, and overrun the articular surfaces like a multiferously ramified vine. This pathological condition is, however, not confined to the so-called chronic affections of the joints, but it may be observed, likewise, in wounds, fistulæ, and more particularly in the neighborhood of diseased bone; in fact, everywhere, where physical obstacles prevail against permanent cicatrization. This should be clearly understood, otherwise it might lead to the impression that the fungoid disease of joints comprises something pathologically specific, which of course does not exist. It is, in fine, the old disease with a new "trade-mark."

FALSE ANCHYLOSIS OF KNEE-JOINT. UNSUCCESSFUL ATTEMPTS AT FORCIBLE EXTENSION. SUBSEQUENT AMPUTATION.

The third specimen is of more than ordinary interest, inasmuch as it elucidates a variety of important pathological and clinical points. The patient is a girl, eight years of age A twist of the knee-joint two years ago, is alleged as the cause of the disease, which may have been aggravated by repeated falls. The general appearance of the patient implies constitutional derangement of nutrition, prevalent among all the other children of the family, although their parents are of indubitably good health. Fifteen months ago, at the request of her uncle, a respectable physician of Paterson, N. J., I took charge of the patient. She was then, as she is now, anæmic and attenuated, and had just passed through a very acute and painful attack of the disease, being still feverish, and without rest and appetite. The joint had lost its contours by peri-articular tumefaction. At its inner aspect there were two fistulous openings, leading into the articular cavity, and discharging but moderately serous fluid. The leg was angularly contracted, rotated, and the toes everted. There was still some mobility within a small angle. The biceps-muscle resisted further extension. Patella firmly adherent to the external condyle of the femur.

I suggested forcible extension of the limb, to be followed by subsequent absolute rest; and, eventually, the division of the biceps. This plan being accepted, I proceeded to its execution, the patient being under the full influence of chloroform. Bearing in mind the frail condition of the patient, and the loose connexion of epiphyses under such circumstances, I observed more than ordinary precautions to obviate accidents. After a few gentle movements of the joint in both directions, I became aware of a diastasis of the femoral epiphysis. This, of course, ended the procedure. The extremity was replaced in its previous position, and retained by proper means. No reaction followed, and the epiphysis eventually agglutinated firmly. The joint, itself, remained *in statu quo ante*. A fortnight ago I was urged to repeat the former trial, and I responded with still greater timidity. In order to remove the muscular resistance, I commenced the operation by dividing the tendon of the biceps-muscle not far from its insertion; and thereupon extended the limb by careful handling, gradually succeeding in bringing it to a straight position. As soon as I relinquished the traction of the leg, the joint bent again, as it were impelled by elastic tissue. I did not succeed in rupturing the inter-articular structure; I equally failed in returning the leg to its proper axis with the femur, or in detaching the patella. The result was, therefore, in the main unsatisfactory. On repeating the movements of the joint, it appeared as if the latter did not participate; and as if there was undue mobility between the shaft and epiphysis of the tibia. Whilst the extremity lay almost extended on the mattress, and I was preparing to adjust the retaining plaster-bandage, I made a last attempt to overcome the still existing resistance by a sudden, though gentle pressure, with the hand, upon the knee-joint; whereupon I noticed a crackling from above the joint, which I did not stop to investigate more closely. The accident induced me to replace the limb in its original position, which I thought soon to alter. Reaction of a very intense and painful character supervening, however, which the patient was not prepared to suffer, impelled amputation. I am happy to say that the patient is since doing well, promising a safe and speedy recovery.

The specimen is certainly of singular pathological interest. We notice, first, the angular position of the joint, in which it is held by soft and very elastic inter-articular tissue. In extending it, the tibia slides backwards on the femur; it subluxates, as it were. This movement of the tibia I misconstrued as bending upon its epiphysis. Had I left and secured the limb in the straight position,

a considerable pressure upon the popliteal nerves and vessels must have ensued, and prejudiced the recovery of the patient. It will be further observed that a rotation of the tibia on the femur is ineffectual, although the peri-articular structural complements are removed. The reasons are twofold. First, the tibia is turned by at least ninety degrees on its axis, so that its internal surface has become the anterior one, and its internal condyle protrudes considerably before that of the femur. In this position, the tibia is firmly retained by the inter-articular connexions. This is, indeed, the ordinary position in the like cases. Various theories have been proffered in explanation. Let us look at the clinical facts. Rotation and eversion supervene in affections of the knee-joint of some duration, and make their appearance *pari passu* with the contraction of the biceps-muscle. They accompany the angular malposition of the knee-joint. In this condition, most patients rest their limb on the outer surface, in which the biceps pulls diagonally. By this traction, not only flexion, but rotation of the leg also, is inevitably produced; as the members of the Society may notice when I imitate this action upon the remaining fragment of the tendon. It is more clearly seen in giving, first to the joint, an extended position, as far as it is susceptible, and then pulling at the tendon, you observe that the tibia follows in the direction of flexion and rotation. If this is correct, as it seems to ocular inspection, the *modus operandi* is clear, and the cause transparent. It explains, likewise, the reason why the patella rides on and agglutinates with the external condyle of the femur; because, through the rotation of the tibia, the anatomical relations are so changed, that the insertion of the ligamentum patellæ arrives below the external condyle of the femur; and the patella has, consequently, to yield, and to accommodate itself to the altered relation. In very aggravated cases, the patella may even slide over the external condyle of the femur, and thus give rise to knock-knee of the highest degree. On inspecting the joint, we notice that the articular cavity is almost entirely obliterated by inter-articular fibrous structure, leaving but a small space free. And so elastic is that fibrous tissue, that it prevents the contact of this portion of the joint, and, therefore, obviates the grating of the bony surfaces upon each other. In flexing the joint as much as possible, we have a glance at the condition of the corresponding two internal condyles. The tibia is simply corroded and softened; whereas, at the surface of the femoral condyle, a small sequestrum is noticeable, which is, however, not entirely detached. This space of the joint communicates, upwards, with the subcrurean bursa. I found the bursa lined with fibrinous material, partly organized, indicating that during the latter period of the disease inflammation has had access to that structure. Without destroying the instructiveness of the specimen, I cannot expose the cruciated ligaments. Below the internal condyle of the tibia, and alongside of the tuberosity of the tibia, the periosteum is destroyed in a circumference of a five cent piece, and to a larger extent detached from the bone. Most probably there is a free communication with the joint at the corresponding place, which I have not, however, been able to discover. In comparing the size of the respective epiphyses with each other, and that of the femur with its shaft, we observe considerable disparity. The shaft of the femur is so small in circumference, and its lower epiphysis so disproportionately large, that they could not be considered as belonging to the same bone, if disconnected. I possess a female skeleton, which represents, in its size and structure, the period of puberty; yet its femoral epiphyses are noticeably smaller than this specimen. The same disparity of size exists with the epiphysis of the tibia. The sequestrum, at the internal condyle of the femur, may have had something to do with this enlargement, but certainly not much, because the enlargement is general, and not confined to the affected spot; nor is there any evidence of an extensive disease of that portion of the joint. It would seem, therefore, that the previous diastasis had given rise to this hyperostosis; and, perhaps, the circumstance that the epiphysis is covered with cartilage to an extent not seen by me before, may corroborate the view which I feel disposed to take of this pathological fact.

The periosteum of the femur and its connective covering are materially thickened and readily detached. About two inches above the epiphysis the shaft of the femur is posteriorly infarcted to the extent of three-fourths of its diameter, which infarction was evidently caused on the occasion I have mentioned.

At the upper part of the popliteal space the periosteum is perforated by ulceration extending along a subperiosteal track of some two inches, without apparent connexion with the joint. The section of the femoral shaft seems to be disproportionately thin when compared with the diameter of the medullary cavity.

In viewing the specimen in its total aspect, it might be questioned whether the exsection of the knee-joint may not have been preferable to amputation, or whether the latter was at all justifiable. On these points I shall be glad to hear the opinions of surgical experts. I may, however, at the same time offer my own views on these questions. As a general thing, I am against all exsections of the knee-joint in children, and for two reasons. In the first place, if parts of the respective epiphyses are left, suppuration is very protracted, and in some instances the rest of the epiphyses being exposed to purulent maceration become detached, and are eventually thrown off as sequestra. Very few patients are in the condition to sustain the drain. But on removing the entire epiphyses at once, the limb becomes much shortened and its usefulness questionable. In the present instance I had no confidence in the restorative powers of the enfeebled patient, and had, therefore, no pretext for risking a profuse suppuration inevitably following exsection. In reference to the amputation referred, I had shown my disinclination to mutilate by the repeated unsuccessful attempts at saving the extremity. When violent reaction had set in after the second trial, nothing but the amputation could save the patient.

FIBROUS TUMOR OF UTERUS SURROUNDED BY ENCEPHALOID NODULES—COLLOID AND CYSTIC DISEASE OF OVARIES.

Six months ago I was called in consultation by Dr. Lord, of Brooklyn, upon an aged lady. In stepping down from a stage, she fell and fractured the neck of the right femur. We placed her upon a water-bed, employed extension by pulleys and weights, and rendered her condition comfortable and painless. A carcinomatous disease of the womb, previously acquired, led to her decease a few days ago. The post-mortem examination placed me in possession of this and another specimen.

The womb, it appeared, had been infested for some considerable time with a fibrous tumor in its anterior wall, of the size of a small orange, which, however, does not encroach upon the uterine cavity. Around the tumor there are several white nodules imbedded, which under the microscope have been recognised as encephaloid cancer from the fact of a very scanty stroma and multifariously shaped nucleolated cells. On the surface of the womb there are similar nodules, some of them pedunculated. The uterine cavity is empty, and extends over the whole length of the growth,

measuring not less than seven inches. The right ovary, the lesser of the two, has undergone the so-called colloid degeneration, and shows the honeycomb arrangement in a very instructive manner. The left one seems to be of similar structure, with additional cystic formation.

FRACTURE OF NECK OF FEMUR.

This specimen of the same patient presents all the peculiarities so well delineated by Dr. G. K. Smith, of Brooklyn, namely, the shortening of the neck of thigh-bone and the characteristic insertion of the capsular ligament. It is from these facts impossible to say whether the fracture was extra or intracystular, or both. There is, of course, no attempt at forming callus.

INTERNAL STRANGULATION OF SMALL INTESTINE THROUGH AN OPENING IN THE MESENTERY; DEATH WITHIN 27 HOURS.

The patient, a negro man of 37 years, alleged to have been well up to his late illness, was suddenly attacked with intense pain in the abdomen and incessant vomiting, proving uncontrollable by the efforts of his attendant. From the fact that a copious alvine discharge was effected, no apprehension seems to have been entertained of internal obstructions. The patient rapidly sank and died, at the 27th hour from the commencement of his trouble. Suspicions of poisoning having reached the coroner, I was summoned to make the post-mortem examination, when the cause of death was ascertained as "internal strangulation of small intestine." There is a perforation in the mesentery near the fastening of the gut in which two slings of the small intestine have become strangulated. Below the strangulation the latter was distended and discolored with extravasated venous blood partly located between the muscular and mucous coats, partly within the tube itself. There is no trace of inflammation. In the abdominal cavity there was but little bloody serum.

Dr. HAMILTON, in reference to Dr. Bauer's recommendation in the first case not to amputate at the knee-joint of children, on account of the liability to separation of the epiphysis, asked if the same objection would hold good in regard to other joints.

Dr. BAUER stated that he would raise the same objection.

Dr. SANDS did not think that experience would bear out this objection. He himself had performed two amputations at the knee-joint, in the New York Hospital, in children, aged respectively six and ten years. Both did well notwithstanding that in one of them the soft parts used for the flap had been injured, and had partly sloughed, while there was besides suppuration in the joint cavity and exfoliation of the articular lamellæ.

Dr. BAUER remarked that the recommendation to remove the cartilaginous surfaces of the joint in these cases had been made by other surgeons before him, and he was inclined to adopt their views upon the question for two reasons. I. That the cartilage is too apt to become detached and give rise to dangerous inflammation of the joint; and II., that the whole epiphyseal extremity might be detached as the result of the same morbid process and death ensue. After all, he considered the question an open one, as there had not been enough experience in this operation to warrant the forming of a positive opinion on the subject, as the whole number reported did not exceed fifty.

Dr. HAMILTON remarked that a statement concerning a matter of so much importance by a gentleman of such experience as Dr. Bauer, should not go unchallenged, more especially as the opinion of most other surgeons on this very question leaned in the opposite direction. The reason why these surgeons were of this opinion was, that they thought it less dangerous to leave a cartilaginous surface than to run the risk of inviting an attack of osteo-myelitis by invading the tissue of the bone itself.

Dr. BAUER expected to meet with this challenge. He did not pretend to offer any results of experience, but simply to state such convictions as his reasoning upon the subject had led him to adopt.

Dr. WOOD remarked that the first case of amputation of the knee-joint performed in this country was by an army surgeon, upon the person of a soldier who had been wounded in the Florida war. The case was afterwards brought to the New York Hospital, and so successful was the result that the operation became quite fashionable. He agreed with Dr. Hamilton that the dangers attending upon osteo-myelitis were prevented by leaving the cartilage; and stated that he had been in the habit of doing this and had never experienced any trouble. He remarked, as long as there was such danger from osteo-myelitis, that we should prefer the line of section through the knee-joint.

Dr. WOOD, in conclusion, stated that he had no experience in amputation at the knee-joint in children.

Dr. SANDS admitted that his two cases could by no means settle this question as far as children were concerned, but that they, nevertheless, were entitled to have their weight.

Dr. BAUER stated that amputation at the knee-joint upon children had been performed but a very few times, and Dr. Markoe, in his paper upon the subject, only reports two or three. The same could be said concerning other articles which had been written upon the operation.

Dr. SANDS exhibited two specimens of fracture of the neck of the femur occurring in the same individual.

In both instances Dr. S. remarked that the fracture was within the capsular ligament. The direction of the fracture upon the left side was from before backwards and from within outwards. The largest piece of bone attached to the head was posteriorly. Upon the other side the appearances of the fracture were somewhat similar to those of the specimen shown by Dr. Bauer. The line of fracture was from before backwards, and from within outwards. The union seems to have taken place by the ligamentous bands which pass from the articular surface of the head of the bone to the inter-trochanteric line, and by bands from the capsular ligament with the fracture surface; so that there was a very perfect false joint, and the head of the bone moved partly upon the capsular ligament and partly upon the inter-trochanteric line.

The right limb was thirty-two inches in length and the left twenty-nine and a half. The cause of death was the effusion of blood upon the surface of the brain.

Dr. WOOD stated that the case to which the specimens belonged was treated by extension the same as in fracture of the thigh, and a fair chance was given for bony union in case there was any disposition for the fractured ends so to do. He further remarked that in both instances of the fracture the patient fell upon the respective trochanter. His opinion was, that in the case of the left femur the fracture was partly within and partly without the capsule.

Dr. HAMILTON called attention to the manner in which the injury was inflicted in reference to the experiments of Rodet. That gentleman states that when the blow was directly upon the trochanter from without, the fracture was extra-capsular; if from behind or below, intra-capsular; if from behind and without, partly within and partly without, the capsule. He be-

lieved that in the main the observations were correct, but the conclusions based upon them were altogether too exclusive. He had seen many cases in old persons where the blow upon the trochanter from without had resulted in intra-capsular lesion.

Dr. Bauer asked Dr. H. what were the statistics of the treatment of those cases partly within and partly without.

Dr. Hamilton answered by saying that he was not possessed of any means to determine when this condition of lesion existed. He did not think that there was any evidence that fractures within the capsule ever united by bone.

Dr. Bauer coincided in this opinion and had been in the habit of acting accordingly, by allowing the patient to walk about by the aid of his splint within eight or nine days after the accident or as soon as the swelling had subsided.

Dr. Hamilton remarked that the only argument in favor of treatment was the difficulty of making a diagnosis as to whether the fracture was wholly without the capsule or not.

Dr. Wood corroborated this statement, but was inclined to give his patients, especially those not far advanced in years, the benefit of a doubt, by placing them for a certain time upon a double inclined plane.

Dr. Messinger referred to a case of fracture of the neck of the thigh bone occurring in a lady ninety-four years of age, whom he treated in conjunction with Dr. Buck. The patient recovered sufficiently to get about comfortably until she was a hundred years old. She was treated upon a double inclined plane, although it was not claimed that bony union had taken place.

The Society then adjourned.

EAST RIVER MEDICAL ASSOCIATION.

Stated Meeting, March 5, 1867.

Dr. V. Morse, President, in the Chair.

THE EFFECTS OF ALCOHOLIC LIQUOR ON THE FATALITY OF CHOLERA.

Dr. Thoms read a statistical paper upon the above subject, which was thoroughly and ably discussed. In support of his view he remarked, that the diagram accompanying his paper on the *Effects of Alcoholic Liquors upon the Public Health*, indicated the fact that the death-rate from cholera was greatest in those wards where the hospitals were established during the prevalence of the epidemic. The summary of our statistical knowledge may be given in the following figures:

The First, Fourth, Sixth, Twelfth, Fourteenth, and Twenty-second Wards have shown a death-rate from this disease of under one in every thousand of the population, while the Eleventh, Fifteenth, Eighteenth, and Twenty-first foot up a death-rate of over 1 in 5,000.

The wards where the predisposing elements of cholera are most unmistakably found are the First, where the deaths from cholera were 1 in 489, against 1 in 22 from all other causes; in the Fourth, where the ratio was from cholera, 1 in 576 to 1 in 26 from other influences; and in the Sixth, cholera claimed 1 victim out of every 212 of its population, while 1 out of 24 perished from diseases, casualties, etc.

The Twelfth, Fourteenth, and Twenty-second Wards, where the malarial influence predisposing to an attack of the disease was most rife, presented us with the following mortuary record: The Twelfth, a death-rate from cholera of 1 in 760, from all causes 1 in 52; the Fourteenth, from cholera 1 in 756, from all causes 1 in 30; the Twenty-Second, from cholera 1 in 908, from all causes 1 in 43.

Cholera hospitals, during the epidemic, were established in the First, Twelfth, and Twenty-second Wards, which, owing to the contagious character of the disease, may have augmented the death-rate.

THE INUNCTION OF BELLADONNA IN STRANGULATED HERNIA.

Dr. Weisse reported the following case: He had been called to a young man, who, upon the day previous, felt something give way in the groin, while lifting a barrel of "*lager bier*." A tumor appeared, which increased in both size and hardness, so much so, that some hours after the accident, when he first saw him, the implicated parts were as hard as marble. He diagnosticated a strangulated hernia, and resorted to taxis without success. After having become thoroughly convinced that surgical interference was necessary, he left the case for the purpose of procuring the necessary aid, merely directing, during his absence, the inunction of the *Ung. Belladonnæ* (℥ i *ad* ℥ i) with the proper amount of gentle but continued force. He returned in an hour with Dr. Stein and prepared to operate, but was agreeably surprised to find that the tumor had, meanwhile, become soft and capable of being kneaded like dough. Taxis again failed, when the idea of throwing the patient into the position best adapted for bringing the weight of the intestines into play, occurred to him. This he did not claim as original, since it had been discussed in some of the British journals, but he desired to go a step further and avail himself of their *recoil* after impingement against the abdominal walls. In carrying out this method of treatment, he was ably seconded by his colleague, who made the necessary lunges with the patient's body at the given signal. The third attempt was successful; the usual gurgling sound of a returning intestine relieving them of their present anxieties.

He had got the hint of treatment by belladonna from a French medical journal, in which it was related that a physician, after exhausting all the recommended expedients, had concluded upon division of the stricture as the last resort. But, to this, the patient, having a horror of the knife, most strenuously objected. Belladonna, with the view to relieve the pain only, then suggested itself, when the parts soon became so relaxed that taxis accomplished the desired reduction. He repeated the report to the late Prof. V. Mott, who was quite favorably impressed with its feasibility, and desired him to put it to the test upon the first opportunity, which, as related, had just presented itself.

The points of interest in the case, he thought, were (1.) The effect of the belladonna; and (2.) The advantages gained by the recoil of the intestine.

Without wishing to extravagantly praise belladonna, he certainly thought that it had not yet attained its proper rank in the materia medica. It might be employed, in his opinion, in nearly all those cases where the poison of the disease manifested itself through the medium of a contracted or insensible pupil, which, in turn, showed some profound impression upon the sympathetic nervous system.

Dr. T. Nichols had fallen into the habit, especially in the case of children, of examining the state of the pupil, and from it had derived some very valuable therapeutical hints. He frequently used belladonna in scarlatina, and was disposed to look upon it as a valuable agent destined to replace opium, which seemed, in the minds of some practitioners, to exclude the suggestion of every other anodyne.

To be continued.

Correspondence.

MEDICAL MATTERS IN CHICAGO.

To the Editor of the Medical Record.

Sir—Our medical colleges have at length completed their winter terms, and have graduated a large number of students. The concluding exercises at the Rush Medical College were of a character less brilliant than would have been the case, had the much-lamented Brainard lived to honor the occasion by his presence. It was, nevertheless, a goodly class of young men—seventy-two in number—who were mustered to receive their diplomas from the hands of their President, Professor Blaney, who is now the sole survivor of those famous pioneers by whom the college was founded. These anniversary exercises received additional interest from the fact that they occurred for the last time in the old college hall. The return of spring will introduce a new era in the history of "Old Rush." A new building will be commenced upon a site adjacent to the one now occupied. In this, when completed, will be the lecture-rooms, and the apartments of the faculty, while the old structure will be renovated and adapted for the reception of the museum and the school of practical anatomy. To occupy the vacant chair of surgery comes Professor Moses Gunn, late of Detroit. Abandoning his professorship in the University of Michigan, he now transfers his residence to this city. Already well known as a lecturer, his great reputation cannot fail to be of service to an institution which has owed so large a portion of its success to the fame of its teachings in the matter of surgery.

The graduating exercises of the Chicago Medical College occurred yesterday afternoon. The degree of M.D. was conferred upon thirty-three young men—the largest class that has ever graduated from that institution. The number of students in attendance upon lectures during the past winter has been one hundred and eight. The increasing popularity of this excellent school is one of the most encouraging signs of the times, and furnishes a sufficient refutation of the arguments urged against the measures which are now being discussed in behalf of an elevation of the standard of medical education. In this school the students are classified as juniors and seniors. The course of lectures is also divided in like manner, so that while one class listens to the professors, the other is engaged in the dissecting-room. At the close of the winter term the juniors are required to pass a searching examination before they can be advanced to the senior class. The method of review by daily recitation is also enforced in both classes. The length of the winter term is five months, and to this is added a spring term of three months. Thus we have here provided a system of medical instruction which is not excelled by any other school in the country; and it appears self-evident that if this method of instruction has been so far successful, in spite of the rivalry of all the other schools, it cannot fail to give universal satisfaction, when the concerted action of our college faculties shall require as much from every candidate for a medical degree. It is impossible to refain from expressing the hope that the proposed conference of delegates, meeting in Cincinnati next summer, may result in the abandonment of a policy for which only the poverty of our ancestors could be an excuse. Our modern sense of propriety should instantly decree the suppression of such an old-time exhibition as still finds favor with too many of our medical school faculties.

The medical students who have passed the winter in our city have enjoyed such opportunities for clinical study as have never before been furnished in the North-west. Our county hospital, located in this city, has now been open for one year. In all the details of its management, it is a miniature edition of Bellevue Hospital. Twice a week during the winter, it has been opened to the students; and they have literally *thronged* the building. Never, even in Bellevue, have I witnessed such eager pursuit of the clinical lecturers; such desperate struggling for standing-room in the dead-house. Though obliged to come a distance of three miles from the college, the students would crowd the amphitheatre of the hospital, every Tuesday and Friday, to a degree only matched in New York by the attendance upon one of Dr. Wood's especial field-days. Our western students are a working class of young men, and none of them are willing to lose a single one of the opportunities afforded during their brief term of metropolitan study.

The Chicago *Medical Journal* has once more changed hands, returning again to the care of a former editor, J. Adams Allen, M.D., Professor of Theory and Practice in Rush Medical College. The Journal will continue to be, as heretofore, the organ of the college; and at the present time may become a very convenient means of advertising the alumni of the changes through which their *alma mater* is passing.

Our State Legislature has recently passed a bill for the establishment of a Health Commission for this city. The special provisions of the act have not yet been given to the public, but rumor reports a general conformity with the features of the New York enactment.

The past winter has been a season of remarkable health. Great uniformity of temperature, combined with an unusual precipitation of snow, has reduced the death-rate to a very low figure. The variable weather of spring will soon increase the tendency to disease, and then our long winter vacation will be over. During the month of February the number of deaths reported to the health officer, including all the cases of still-birth, were only two hundred and fifty-five, in a population of two hundred thousand. Excluding still-births, the mortality in January was two hundred and seventy-seven. During the year 1866, notwithstanding the prevalence of cholera, which destroyed nine hundred and eighty-seven lives, the total mortality was only 5,926, being equivalent to a death-rate of a trifle less than 30 to the 1,000 living, or, excluding the victims of cholera, a trifle over 24 to the 1,000 of population. This favorable exhibit is by no means due to the superiority of our climate, or to an advanced state of sanitary intelligence, but to the absence of tenement houses, and to the youth of the mass of the community. When the extreme of hoary age shall begin to add its quota to our returns of mortality, the annual death-rates will undoubtedly exceed their present figure. M.

COMMENCEMENTS OF THE COLLEGES OF PHILADELPHIA.

FEMALE PHYSICIANS, ETC.

Philadelphia, March 16, 1867.

To the Editor of the Medical Record.

Sir—The past week has been full of interest to the medical profession of this city. Our medical colleges have sent forth their quota of graduates, and our County Medical Society has had an animated discussion as to the status of medical practitioners of the gentler sex.

At the public commencement of the Jefferson Medical College, held on the 9th of March, the degree of

Doctor of Medicine was conferred by the Hon. Edward King, LL.D., President of the Institution, upon one hundred and fifty graduates, after which the valedictory address was delivered by Prof. BIDDLE, of the chair of Materia Medica. Dr. Biddle's address was admirably adapted to the occasion, and abounded in valuable counsel, not least of which was the advice to avoid two great impediments to success in practice, one being the maelstrom of politics, and the other the fascinating pursuit of special departments of science; for the field of medicine is itself amply sufficient to employ the entire talents of the physician. He also recommended a strict adherence to the Code of Ethics of the American Medical Association, and active membership in a medical society.

On the 14th of March the annual commencement of the Medical Department of the University of Pennsylvania was held at the Philadelphia Academy of Music, and the degree of M.D. was conferred upon 156 graduates. An excellent and affectionate valedictory address was given by Prof. CARSON, who also counselled strict adherence to the national code of ethics, and connexion with local medical organizations.

The number of graduates from Pennsylvania was in large proportion in both institutions, being 70 at the Jefferson Medical College, and 99 at the University. The number of matriculants during the course was 356 at the Jefferson, 168 of whom were Pennsylvanians; and 464 at the Medical Department of the University, of whom 307 belonged to Pennsylvania, leaving 188 from other States at the Jefferson, and 157 outside of our own State at the University.

On the evening of the 13th there was assembled at the conversational meeting of the Philadelphia County Medical Society, a larger number of members than usually attend; the subject for discussion being the report of the committee on Female Physicians.

At the meeting of the Medical Society of the State of Pennsylvania, held in 1866, there was passed a resolution to the effect that it was considered unprofessional to consult with the professors and graduates of female medical colleges, as at that time organized. At the meeting held last year at Wilkesbarre, a resolution was introduced to repeal the former resolution, which was lost by a very closely contested vote; and another resolution was offered to the effect that nothing in the resolution of 1860 should be so construed as to prevent members who so desired, from consulting with properly qualified female practitioners; and for this was substituted and passed another postponing further consideration for a year, and recommending the discussion of the subject in the interim by the various county medical societies. On this subject see my letter in No. 9, p. 220, vol. I., of THE RECORD.

On the evening in question the report of the Committee, as prepared by the chairman, Dr. D. Francis Condie, was read by that gentleman. This admirable report, covering the entire ground, I hope to give you in full, in a regular report of the proceedings of the Society. The report acknowledged the capability of the female mind to accomplish anything intellectually that can be acquired by the male; at the same time it was strenuously opposed to encouraging females to devote themselves to this sphere of usefulness, unless only so far as to properly fit them for intelligent nursing of sick, with which the proper mission of woman, in this direction, was attained; but, inasmuch as certain women *would* undertake the study and practice of medicine, and their services would be solicited by a large number of invalids, our duty to the community at large demanded that the profession should see that such females could have access to proper instruction, and that if such were the case, it would be improper to refuse to consult with them. The report suggested their attendance at the same medical institutions as the male student, and under the same discipline; and that if it should be deemed inexpedient to permit their presence in the lecture-room at the same time with male students, the same lectures should be delivered to females at different hours. The report concluded with a resolution adverse to the repeal of the resolution of 1860.

An animated discussion ensued, which was participated in by many of the members, and a resolution to the effect that the matter should be referred to the American Medical Association, was laid over for action at a special meeting, at which it is hoped a larger attendance will secure an action fully representing the views of the profession.

The lectures of the Auxiliary Faculty of Medicine of the University of Pennsylvania, embracing various branches of natural history with special reference to their medical relations, will commence in April, and be on the same subjects and by the same professors as last year. The Summer Course of Lectures inaugurated last year at the Jefferson Medical College, will be resumed the coming summer, but the scheme has undergone some modification in subjects and lecturers.

This course will be as follows:—

Clinical Surgery, by Prof. Gross.
Clinic of Diseases of Women and Children, by Prof. Wallace.
Chemistry applied to Toxicology, by Prof. Rand.
Materia Medica and Therapeutics, by Prof. Biddle.
Clinical Medicine, by Dr. Da Costa.
Visceral and Surgical Anatomy, by Dr. W. H. Pancoast.
Operative and Minor Surgery, by Dr. J. H. Brinton.
Ophthalmic and Aural Surgery, by Dr. R. J. Levis.
Venereal Diseases, by Dr. F. F. Maury.
Pathological Anatomy, by Dr. W. W. Keen, Jr.

It is gratifying to be able to chronicle here one new and valuable movement in a proper direction, and that is the teaching of Pathological Anatomy. The sooner that this branch is made part of the regular winter curriculum of studies, the better. I believe that the Harvard School is the only one at which it has heretofore been regularly introduced, and the necessity exists for following this example wherever medicine is taught. At present but little knowledge of pathological anatomy is conveyed to the student, and that little is taught incidentally with other branches. The establishment of a separate chair of Pathological Anatomy would relieve the chairs of Practice and of Surgery to a great extent, so that the professors of these practical branches would have time to teach them more thoroughly. As it is, in more than one instance but partial courses are given in these practical subjects, and the study of many important diseases is entirely neglected. This fact should be borne prominently in mind when the representatives of the various medical faculties meet in convention at Cincinnati in May next.

In this connexion you will be glad to learn that DR. ALFRED STILLÉ, Professor of the Practice of Medicine in the University of Pennsylvania, made MORBID ANATOMY the subject of a lecture, introductory to the course of clinical instruction at the Philadelphia Hospital for the winter session of 1866-7; and he has been sufficiently impressed with its importance to have his lecture printed in pamphlet form, a copy of which should be placed in the possession of every one interested in progressive medical education. One or two extracts from this timely and admirable lecture will be in place.

"I shall endeavor to show you that morbid anatomy

is an indispensable element of medical science, that its position is a fundamental one, and that it is indeed the very corner-stone of that science. Let me attract your attention towards it and fix your interest upon it; let me move you to share the wonder which I feel, and which I can scarcely find words to express, that in neither of the great schools of this city does there exist a professorship devoted exclusively to a scientific exposition of pathological anatomy.

"A description of disease without an accurate account of the lesions which accompany it, is like a drama, or a tale, or a history, which stops short before the catastrophe that explains and justifies, and gives an interest to all that has gone before. Morbid anatomy draws the veil aside which conceals the machinery upon whose movements all the phenomena of disease depend, and it, alone, relieves us from the superstition which once pervaded the medical world, that every disease is a diabolical inhabitant of the body which is to be exorcised by charms and incantations.

"Without the revelations of morbid anatomy we should possess as little knowledge of the nature and seat of diseases, as the physician of an oriental harem, who is obliged to prescribe for his fair patients without being allowed either to see or to touch them. Symptoms are the inarticulate cries for relief of suffering organs. Woe to the sick if we have not learned to interpret their language! The keys to its meaning are not only interrogation, but also inspection and all the methods of physical examination, which, after all, are so many lessons in morbid anatomy; for they enable us to discover the seats of disease and the changes of structure which it involves."

And the lecture concludes: "If you shall become duly impressed with the extreme interest and the incalculable value of morbid anatomy to yourselves and to all disciples of the healing art, unite your voices in an appeal to those who regulate the studies of our Medical Institutions, and solicit them to put an end to the great defect of medical education which we now have to deplore. Importune them to create in every Medical College a chair from which the science of morbid anatomy shall be adequately taught, so that you and your successors may cease to lament the imperfect and unscientific notions of disease which you are now too often compelled to accept, and which, so long as they continue to prevail, will oblige American Medical Science to walk with uncertain steps and veiled countenance behind her European sister."

The above quotations need no commendatory comment; they have been introduced here in the hope that the views of one of our most eminent teachers of medicine will be brought, through the medium of your extensive circulation, to the knowledge of many preceptors whom the pamphlet will not reach, in order that they, too, may unite their voices in an appeal for the removal of a great defect in medical instruction.

Yours truly,

C. J.

OVARIOTOMY PERFORMED TWICE SUCCESSFULLY UPON THE SAME PATIENT BY THE SAME SURGEON.

To the Editor of the Medical Record.

Sir—Dr. Spencer Wells, before the *Royal Medical and Chirurgical Society* (*London Lancet*, Feb. 1867), alludes to three cases in which ovariotomy has been twice performed upon the same patient. The author refers to a fourth case, "believed" by him to be the first, in which ovariotomy has been successfully twice performed upon the same patient by the same surgeon. In this case Dr. Wells removed the left ovary in February, 1865. In about eighteen months and one half after the first operation, the right ovary was also "removed with complete success."

I submit the report of a case upon which I have *successfully* operated twice. The patient was Mrs. Ellen Simmons, of South Bristol, Ontario county, N. Y. I removed the left ovary April 14, 1858. The case is reported in detail in the *American Journal of Medical Sciences*, October, 1858. The tumor weighed thirty pounds: the patient recovered; the right ovary was then healthy.

During the month of July, 1859, the patient discovered the second tumor, which increased so rapidly that on the eleventh of September, 1859, I was called to visit her.

On the twelfth I drew from the tumor about twenty pounds of fluid, and on the thirteenth she menstruated.

I decided to operate, which I did on the twenty-first of September, 1859—seventeen months and six days from the first operation. Chloroform having been given, an incision was made through the old cicatrix. The tumor, weighing thirty pounds, was removed; the pedicle secured by a single ligature; the wound united by sutures, dressed with a compress and corset-bandage, and the patient made a second recovery.

I was assisted in this operation by Drs. Jewitt and Carson, of Canandaigua; Durgan, of South Bristol; Parmely, of West Bloomfield, and Peltier, of Buffalo. *My operations were, therefore, performed nearly six years before those by Dr. Wells, and, accordingly, my case is believed to be the first in which ovariotomy was ever successfully performed twice upon the same patient by the same surgeon.*

Desiring to honor American Surgery rather than myself in this interesting matter,

I am, sir,

Your obedient servant,

Hazard A. Potter, M.D.

Geneva, N. Y., March 17, 1867.

THE INSTITUTION FOR RUPTURED AND CRIPPLED.

A CASE PRESENTED TO THE PATHOLOGICAL SOCIETY.

To the Editor of the Medical Record.

Sir—I have just read your published report in the first of March number, of the transactions of the Pathological Society of Nov. 28, 1866, and regret to see myself represented as stating what I never had any grounds for doing, viz. that "next he entered the Institution for the ruptured and crippled, where he remained under treatment for the greater part of two years," alluding to the boy whose hip-joint disease had fallen to my care, and whose history was related on that occasion. It was never my understanding of his history that this boy had been treated at the institution named, as a resident patient, and I therefore never intended to say so. Please, therefore, to allow, in the interest of those who may be concerned, and of truth, a correction of that report. I intended to state, what I then knew, and still believe, *that this patient was under the care and treatment of said institution for about two years before I saw him.* It was, however, as an out-patient, according to all the information I ever could get upon the matter. Please, give this an early place, and oblige those whom the report may affect unfavorably, as well as

Yours very truly,

Stephen Rogers.

March 2, 1867.

New Publications.

ON THE ACTION OF MEDICINE ON THE SYSTEM. By FREDERICK WILLIAM HEADLAND, M.D., B.A., F.L.S., Fellow of the Royal College of Physicians. 5th American, from 4th London Edition, Revised and Enlarged. Phil.: LINDSAY & BLAKISTON. 1867.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA. 1867.

Medical News and Items.

CLITORIDECTOMY.—Mr. Baker Brown and Mr. Philip Harper, in deference to the opinion of the medical press on the subject of clitoridectomy, have determined not to perform the operation in the London Surgical Home, pending professional inquiry into its validity as a scientific and justifiable operation. What now will be the chance of recovery for the poor epileptic female with a clitoris?

SMALL-POX IN LONDON.—Small-pox is prevailing to a frightful extent in London. Altogether there have been four hundred and sixty-two lives lost by this one disease in the space of thirteen weeks—an aggregate which may without exaggeration be spoken of as really alarming. It is most sad to reflect on the ignorant carelessness or the reckless folly of those who not only endanger the lives of their children and of themselves, but also jeopardize the lives of their neighbors and of the public generally, by neglect of the simple means available for reducing the baneful power of small-pox to a nullity. It is important that it should be known, moreover, that throughout the country—in large towns and rural districts alike—this loathsome and deadly malady is spreading, as well as in London.—*Lancet.*

WARNING AGAINST THE SIMULTANEOUS PRESCRIPTION OF CHLORATE OF POTASS AND IODIDE OF POTASSIUM.—This has great importance; since in syphilitic and other affections these drugs are often combined. But M. Vee has demonstrated the danger of such practice by showing that the chlorate of potass gives up its oxygen, which forms with the iodide of potassium an *iodate*, whose toxic properties have been recently demonstrated by Melsen.—*Gazette Médicale.*

FERRUM REDACTUM.—Metallic iron with a variable amount of magnetic oxide of iron, prepared by reducing peroxide of iron to the metallic state, by heating it in a gun-barrel in a furnace and passing through it dry hydrogen gas. A powerful hæmatinic and tonic. . . . . Dose, gr. ij.—gr. vj.—*Waring's Practical Therapeutics.*

TO DETECT SULPHURIC ACID IN VINEGAR.—A German journal publishes a neat process, which may be thus briefly stated. Into the vinegar to be tested, put a small quantity of starch, boil the solution down to half its original measure, then drop into it a very minute portion of iodine. If the vinegar is pure the usual blue tint will be shown, but if it be adulterated with sulphuric acid no such coloration will take place, because the action of this acid upon starch converts it into glucose or grape sugar.

OSMOTIC PROCESS FOR SEPARATING SUGAR.—In France sugar has been lately separated from beet molasses by applying the osmose principle. The membrane used is paper-parchment. Water is passed upwards and molasses downwards on the opposite side of the membrane.

ANECDOTE OF THE LATE PROF. DAVID S. CONANT.—An instance illustrative of his coolness and boldness may be briefly adverted to. On one of his visits to his home he found his father suffering from a cervical tumor. The disease had already developed to such an extent as to threaten suffocation by pressure on the trachea, and was manifestly malignant. Satisfied that the danger of sudden death was imminent, he determined to remove as much of the mass as practicable to relieve the pressure. In the course of the operation, he came upon the carotid artery. Without any hesitation he applied a ligature, and then extirpated all of the mass that could be safely removed. This operation gave great relief, and undoubtedly prolonged the father's life some months. It is not every surgeon, however, who could use the knife on his own parent, for at best only a palliative operation. —*Memorial Address, Prof. A. B. Crosby, Univ. Vermont Medical Department.*

CHARITABLE BEQUESTS.—Paschal P. Pope, of Boston, recently deceased, bequeathed $190,000, as follows:—To Harvard College, $50,000, for a Professorship of Latin Language and Literature; Home for Aged Men, $30,000: Sailors' Snug Harbor, $30,000; Boston Dispensary, $20,000; Harvard Benevolent Society, $20,000; Boston Society of Natural History, $20,000; the Temporary Home for the Destitute, $10,000; Boston Provident Association, $10,000.

THE THERAPEUTICS OF INHALATION.—TO THE PROFESSION.—Dr. J. Solis Cohen, of Philadelphia, is engaged in preparing for publication a work upon "*The Value of Inhalations in the Treatment of Disease*," and he requests the assistance of his professional brethren in supplying clinical material. Contributions will be duly acknowledged, and attention drawn to every source from which instruction may be derived. Negative results, and results apparently or actually unfavorable, will be of peculiar value. Even isolated observations will be of service. Information is more particularly desired as to results from inhalations in sore throat in all its varieties, croup, diphtheria, œdema of the glottis, asthma, and phthisis. Where other treatment has been conjoined with inhalation, mention should be made of at least its general character, and an estimate be formed of its value. Where favorable results are reported, an opinion is requested as to the probability of equally favorable results, had inhalation not been resorted to. Any general information on the subject in the possession of the writer will be placed at the disposal of correspondents intending to contribute their own observations. For the past few years this subject has attracted a great deal of attention abroad and at home, and a series of statistics of its therapeutic results, collated from the experience of American physicians in different sections of our country, cannot fail to prove of great professional value. We invite our readers to coöperate with him. Address, Dr. J. Solis Cohen, 1106 Walnut street, Philadelphia.

DEATH OF DR. WILLIAM JOHNSON OF WHITE HOUSE, N. J. —At White House, Hunterdon co., N. J., January 13, 1867, Dr. William Johnson died in the 78th year of his age. He was born at Princeton, N. J., on the 18th of February, 1789. His father, Thomas P. Johnson, was a lawyer of distinguished ability, and was one among few in this State upon whom was conferred the honorary degree of Sergeant-at-Law. His mother was a member of the distinguished Stockton family, many of whom have held important offices in State and National trust. At the early age of twelve years death deprived him of the sympathy and guidance of his mother, and he was left to the guidance, the wisdom of his distinguished father. After his graduation from the University of Pennsylvania he

settled at White House, N. J., in July, 1811. He soon fell into a wide and laborious practice, to which he devoted himself with singular fidelity and zeal. With a vigorous and active mind, he was a most laborious student, and constantly brought to his practice the results of patient research and study; added to this, he wrote with much clearness, elegance, and force. He furnished articles for different medical periodicals until blindness compelled him to abandon both his pen and practice. As might be expected, he was a skilful practitioner, and enjoyed a wide reputation. Many also sought his presence that they might sit at his feet as pupils of Galen.

CHANGES IN THE FACULTY OF PARIS.—The vacant chairs in the Faculty of Medicine of Paris have been filled as follows:—Professor of General Pathology and Therapeutics, Lassaigne; Professor of Pathological Anatomy, Vulpian; Professor of Therapeutics and Materia Medica, See; Professor of External Pathology, Broca; Professor of Internal Pathology, Oxenfeld; Professor of Internal Pathology, Hardy; Adjunct-Professor to the same chair, Raynaud. The resignation of Nelaton is spoken of.

A HOSPITAL FOR NERVOUS DISEASES.—An institution for the treatment of paralysis, epilepsy, and other nervous diseases, will be opened at Lake Mahopac, Putnam co., N. Y., in the early part of this spring. It will be strictly private, and under the direction of Dr. M. Gonzalez Echeverria, who is so favorably known in connexion with the practice of the specialty. In addition to the best comfort and to the natural advantages of the location, every means of special treatment beneficial for this class of diseases will be afforded to the patients. The institution will be provided with a room for light gymnastics, the proper apparatus for the exercise of paralytics, and the conveniences to administer the different kinds of baths.

ANNUAL COMMENCEMENT OF THE COLLEGE OF PHYSICIANS AND SURGEONS.—The seventieth annual commencement of the College of Physicians and Surgeons took place at Steinway Hall March 14th, a large and fashionable audience honoring the occasion with their presence The President of the College, Edward Delafield, M. D., the members of the faculty, the Trustees of the College of Physicians and Surgeons and of Columbia College, as also several prominent physicians of this and the neighboring cities, occupied seats on the platform. The proceedings were opened with prayer by the Right Rev. H. A. Neely, D. D., Episcopal Bishop of Maine. The Degree of Doctor of Medicine was then conferred on ninety-nine young gentlemen.

Upon the conclusion of this ceremony, Professors Clark and Dalton announced the prizes as follows:—first Harsen prize to J. Ackerman Coles, A. B., of New Jersey; second to D. Valentine Lynch, of New York city. The two faculty prizes were awarded, first to Albert H. Buck, A. B., of New York city for a thesis on "*Trichina Spiralis*," and the second to Ira Remsen, of New York city, for a thesis on "The Fatty Degeneration of the Liver." In connection with these latter prizes, honorable mention was made of the theses presented by the following graduates: Jonathan Edwards, Jr., of Rensselaer county, N. Y., Henry E. Handerson, A. M. of New York city; Roger S. Tracy, A. B., of New York city.

The address to the graduates was then pronounced by the Rev. Henry W. Bellows, D. D. It was a well-conceived tribute to the medical profession, and was well received by the audience. The valedictory address was delivered by William H. Palmer, A. B., M. D., after which the exercises were closed with the benediction.

ALUMNI ASSOCIATION OF THE COLLEGE OF PHYSICIANS AND SURGEONS N. Y.—The ninth annual meeting was held at the College building corner Twenty-third Street and Fourth Avenue on Friday March 15th ult. The President, Prof. Alfred C. Post delivered the inaugural address in which he reviewed in epitome the progress made in the healing and kindred Arts for the past 60 years.

The Committee on award of the "*Delafield* Prize," reported that but one essay had been offered in competition which, notwithstanding the industry and care manifested in the preparation, was, under the circumstances, scarcely entitled to the prize, The Committee recommended that the fund be increased to $3,000, the interest of which should be devoted to the furtherance of the object intended. The designation of the Prize, at the urgent request of Dr. Delafield, was changed to that of the "*Alumni Association*;" and a subsequent motion that the fund be increased to the desired amount by voluntary subscriptions among the graduates prevailed. A Committee was then appointed to make the necessary appeals. After an animated debate, in which Drs. Parker, Eliot, Draper, Watts and Calkins participated, the subject of the Essay was left as during the past year "to the option of the Competitor" and under the same restrictions. Much interest was manifested in the "necrological record" which was read by the Secretary, Dr. Eliot. This custom, according to the *Historiological and Genealogical Register* for 1860, from which the Secretary quoted, appears to have been originated by the late Prof. J. L. Kingsley at Yale College in 1842, and was afterwards adopted at "Harvard" in 1851, at the suggestion of the late Hon. Edward Everett; Joseph Palmer, M.D., being the necrologist in the latter seat of learning for that and several succeeding years. The report was received with thanks, and the Secretary instructed to prepare from materials in hand a record of all deceased alumni for future reference. The following officers were elected for the ensuing year: *President*, Dr. Gurdon; *Vice President*, Dr. Galen Carter; *Recording Secretary*, Dr. Ellsworth Eliot; *Corresponding Secretary*, Dr. John Shrady; *Treasurer*, Dr. Henry B. Sands.

The Committee on Prize Essays consisting of Drs. William H. Draper and William E. Roberts was combined. The Councillors re-elected, the only change being the substitution of the name of Ezra M. Hunt of New Jersey, for that of Surgeon Charles S. Tripler, U. S. A., deceased. The numerous assemblage then adjourned to the Ashland House, where a liberal collation prepared by the faculty of the College awaited them.

THE SPRINGFIELD SOCIETY FOR MEDICAL IMPROVEMENT, is the name of the society which has recently been organized in Illinois, in accordance with the general statutes made and provided, and which, in the main, patterns after a similar society in Boston. Its organization, objects, etc., are in brief as follows:—Secretary and Treasurer, G. S. Stebbins, M.D.; Cabinet-keeper and Librarian, W. W. Gardner, M.D.; Presidential Committee, V. L. Orsen, M.D., M. Calkins, M.D., S. F. Pomeroy, M.D., A. R. Rice, M.D. The objects of the society are, the cultivation of confidence and good-will between the members of the profession, and the eliciting and imparting information upon the different branches of medical science, and the establishment of a museum and library of pathological anatomy.

DR. TRIQUET, the distinguished writer on aural surgery, in Paris, died in January of this year, in the forty-third year of his age.

DR. WM. M. NICKERSON, Del., has been confirmed by the United States Senate as Assistant-Surgeon, United States Navy.

Original Communications.

SOME POINTS IN THE

ANATOMY AND PHYSIOLOGY OF THE SKIN,

AND IN THE SO-CALLED SYMPATHIES; BEING THE SUBSTANCE OF TWO LECTURES DELIVERED BEFORE THE NEW YORK MEDICAL JOURNAL ASSOCIATION.

By CHARLES E MORGAN, A.B., M.D.,

PHYSICIAN FOR DISEASES OF THE SKIN AT THE NORTHERN DISPENSARY, NEW YORK CITY.

The skin consists of—1. The external, non-vascular epiderm, or cuticle (ecderon of Huxley).—2. The *papillated*, neuro-vascular *corium*, or true skin (enderon of Huxley); and 3. The subcutaneous areolo-fatty tissue containing the sweat and sebaceous glands and the hair follicles. The *epiderm* consists again of two layers, an external or horny layer (stratum corneum), formed of flat, polygonal, usually nucleated epithelial scales adhering strongly together by their margins and surfaces, so as to give rise to nearly parallel strata or laminæ. 2. An internal layer separating this from the next one (the rete Malpighi), and perhaps really the oldest cells of the latter, though running parallel with the former, is made up of flat but nucleated cells. Here it is where the horny stratum is regenerated and where pathological processes usually begin.

The *rete* Malpighi, at its upper part, consists of large distinctly nucleated cells studded over with points like a chestnut-burr, and hence their name of spinous or dentated cells, or from their discoverer, cells of Schrön. As we go further down, the cell-walls become less and less distinct, until finally we may get only very small nuclei, having a more or less regular arrangement, and imbedded in a finely granular substance—the *intermediar membrane* of Henle. Between this membrane and the substance of the papillæ is a structureless band called by Todd and Bowman, from its situation, the *basement membrane*, but considered by Krause to be simply the optical expression of the delicate crenation of the surface of the papillæ.

The *papillæ*, or conical bodies, constituting the external surface of the derm or corium, are, like the latter, formed essentially of connective and elastic tissue, and are divisible into: 1. The *vascular*, containing a capillary loop and generally a terminal lymphatic blind cul-de-sac; and 2. The *nervous*, containing a peculiar sensitive nerve termination called from its position *axile body*, its supposed function *tactile body*, and its discoverer *body of* Meissner: only exceptionally does the same papilla contain a capillary loop and a tactile body; and everywhere the vascular papillæ rise above the less numerous nervous papillæ. The tactile body is oval in shape, with irregularly indented outlines, and formed of a thick, firm, and resistant cell-wall of connective tissue, with elongated nuclei arranged transversely as a rule, and softer cell-contents of a clear, finely-granular amorphous matter. In some cases, however, I have detected another tunic with nuclei arranged longitudinally, that is, parallel to the axis of the body, and most internally a structureless membrane completing the resemblance to an aborted hair-follicle, as Kammler first surmised it to be. One or more double-contoured nerve-fibres rise up to the bottom of the body and there pierce it, or else do so at the top after having wound spirally around the body to this point, and leaving the nucleated neurilemma behind, terminate in the softer cell-contents in one or more pale axis cylinders. In the papillæ of the conjunctivæ, the lips, glans penis, we have the so-called *club shaped bodies* of Krause, consisting of a thin, nucleated cell-wall, containing a transparent, finely granular mass, in which a sensitive nerve-fibre losing its double contour ends in a single pale axis cylinder, or in a convoluted mass. In the subcutaneous areolo-fatty tissue along the sides of the fingers and in the palm of the hand, the sensitive nerves often terminate in the bodies of Vater or Paccini. Each such body consists essentially of a Kraussian body situated axially and surrounded by numerous concentric layers of nucleated connective tissue, making a kind of capsule for it.

The *sweat* gland is divisible into the glomerulus or glandular coil, and the excretory duct. The glandular canals consist of an external tunic—of indistinctly fibrous connected tissue with scattered elongated nuclei—lined internally by a finely granular tunica propria, covered internally by a single or multiple layer of polygonal epithelial cells. The large glands of the axilla possess, in addition, a middle coat of smooth muscular fibres running parallel with the axis of the tube. The coils of the glomerulus are bound together by areolo-fatty connective tissue in which ramify numerous capillaries. The excretory duct, whose diameter is always inferior to that of the glandular canal, though consisting essentially of the same elements, pursues a slightly wavy course from the upper part of the glomerulus up to the rete Malpighi, where, reduced to its epithelial lining, it dilates to twice its previous size, and after making two to sixteen spiral twists terminates on the surface of the epiderm in the small, round, often funnel-shaped opening called the sweat-pore. According to Sappey there are 700,000 to 800,000 sweat-glands; but Erasmus Wilson makes out 7,000,000 in the adult man, and estimates the total extension of sweat tube at nearly twenty-eight miles.

The *healthy sweat* is a thin, colorless liquid, somewhat troubled by the particles of epithelium suspended in it; of somewhat saline taste and acid reaction, except where large quantities have been given off, and in the case of that of the axillæ, the sole of the foot and between the toes, the inguino-scrotal and vulvar regions, etc., where it is alkaline. The human sweat contains water, ameisenic, acetic, butyric, propionic, and occasionally baldrianic (v. valeric) acids, the chlorides of sodium and potassium, the alkaline sulphates and phosphates, the earthy phosphates and oxide of iron, the usual salts of the blood. Occasional ingredients are ammonia, the hydrotic or sudoric acid of Favré, alkaline lactates, and various pigments not thoroughly studied.

In 1000 parts.

	Urine. (J. Vogel.)	Sweat. (Favré.)
Water	960.0	995.573
Solid matters	40.0	4.427
Urea	28.0	
Uric acid	0.5	
Chloride of Sodium	11.0	2.780
" " Potassium		0.748
Alkaline Phosphates	3.2	} traces.
Earthy Phosphates	0.8	
Alkaline Sulphates	2.0	0.011
" Carbonates		0.016
Ammonia		
Alkaline Lactates	4.0	0.317
" Sudorates		1.573
Fatty matters		0.013
Creatine, Creatinine, Xanthine, Hypoxanthine, Oxalate of Lime, Uro-hæmatine	In small quantities.	

On comparing Favré's analysis of the sweat with J. Vogel's of the urine, we find that in both excretions the quantity of water is large, but in the urine there

are more solid matters than in the sweat, more urea, sulphates, and phosphates, but relatively less chloride of sodium; and while having exclusive possession of the uric acid, creatine, creatinine, oxalate of lime and urohæmatine, it has no lactates, or sudorates, no ameisenic, acetic, propionic, butyric, and baldrianic acids. In uræmia, especially that due to Bright's disease or cholera, urea is largely present in the sweat. In diabetes this excretion contains sugar; in rheumatic gout uric acid as urate of soda, but never albumen; and the stickiness of certain sweats occurring as a grave symptom in phthisis, cholera, typhoid and puerperal fevers, is due to no known substance. In icterus the bile-pigment colors the sweat, tears, and urine dark yellow; and in rare instances blue, green, red, black, and even phosphorescent sweats have been observed. Benzoic, hippuric and tartaric acids, when taken internally, pass rapidly into the sweat, whereas salicine and quinine do not at all, and iodide of potassium requires some five days to do so. The coloring matter of rhubarb; certain odorous principles like asafœtida, musk, garlic, onion, leek, etc., when taken freely, taint the sweat, and so, too, do certain medicines such as cantharides, valerian, camphor, iodine, sulphur, phosphorus, tellurium, etc.

The kidneys are as it were closely compacted bundles of sweat-glands placed along the course of one of the largest arterial streams of the economy, and secrete continually, whilst the sweat-glands are minute kidneys scattered irregularly over the surface of the body on the terminal divisions of the aorta, and only secrete occasionally. To complete the parallel both these apparatuses are subjected to the influence of the nervous system. Thus, while fear causes the breaking out of a profuse sweat, hysteria gives rise to an abundant flow of a pale urine of low specific gravity. Again, when the kidneys act without energy, as during active exertion in the summer of dry, warm climates, during the existence of a low barometric pressure, the sweat glands instead of discharging, as is usual, but 500 grammes a day, may pour out 2,650 grammes in an hour and a half. Lastly, diaphoretics may act as diuretics or *vice versâ* according to the manner in which they are used.

The skin is also an organ of respiration absorbing oxygen and exhaling carbonic acid; the proportion to that escaping from the lungs being, according to Scharling, as 0.0089 to 0.012.

The *sebaceous* glands are not follicles but simply grouped glands, occurring generally in connexion with the hairs, though largest where these are smallest, as on the nose. These glands consist of a homogeneous, transparent, finely granular *tunica propria*, lined by polyhedric epithelial cells, never normally nucleated, and filled with minute oil drops which, escaping on the rupture of the cell, help to form the sebaceous matter. The latter, examined microscopically, is seen to re-

In 100 parts.

	Milk. (Vernois and Becquerel.)	Smegma præputii. (Lutz.)
Water	88.90	
Solid matter	11.10	
Casein	3.92	12.00
Insoluble salts, Albumen, &c.		.2
Lactose	4.36	
Gelatine		8.7
Chloride Potassium	1 88	
Butter	2.66	
Fatty matter		40.5

semble milk very closely; indeed their chemical compositions are nearly, if not quite, identical as here seen, and many facts tend to prove that the sebaceous glands are really rudimentary milk glands scattered over the surface of the body; and that the ceruminous glands in the external auditory meatus are a further transition than the sweat glands of the axilla into the sebaceous glands, just as the mucous glands of the mouth, etc., are the connecting link between the sebaceous and the sweat glands in the other direction.

The sense of TOUCH, in its widest acceptation, implies our consciousness of all the sensorial impressions which are neither visual, auditory, olfactive, nor gustatory; whereas in its limited application it signifies the modification of the general sensibility restricted to the skin and enabling us to form definite ideas of the size, number, weight, temperature, and consistency of the bodies we are brought in contact with. Evidently, then, even in this limited sense touch is a complex phenomenon, and hence it was that E. H. Weber subdivided the tactile impressions according to their causation into:

The sense of *tactile discrimination* or *localization*—that is, the power enabling us to distinguish between two similar sensations excited simultaneously in two different points of the skin, and to ascertain in a measure, not only their distance apart, but also their relative situations. In 1829, Weber discovered that when the points of a pair of dividers or compasses, guarded by bits of sealing-wax, were applied to the skin, the eyes being closed, they were not felt as distinct separate points unless the *inter-compass point distance* (Dr. Graves's limit of confusion) had a certain value which varied in different regions of the body. Thus, on the tip of the tongue it was only one-half Paris line or one twenty-fourth of an inch; on the finger-tip one line, and on the trunk, forearm, and thigh, thirty lines. This delicacy of perception is greatest in the direction of the distribution of the nerves. Thus, on the middle of the forearm the points are felt as separate when two inches apart if placed transversely, but scarcely so at three inches if in a line parallel to the long axis of the limb. When two points, applied simultaneously to the skin, are clearly distinguished, the separating distance seems to increase with the acuteness of the tactility in the front of the surface under examination. Hence, if the points of the compass, while separated by two or three lines, are applied to the cheek just in front of the ear, and then moved gradually towards the angle of the mouth, the points seem to recede from one another in consequence of the increase in tactile acuteness. When the two points are applied, not simultaneously, but in succession, they seem further apart, and, up to a certain limit, all the more so the longer the interval between their successive applications. The same seeming increase is observed when the points are applied simultaneously to different sides of the median line; or on parts like the two lips or eyelids, whose relative position is not constant; or, as is the case with the palmar and dorsal surface of the fingers, whose structure and function are different. Valentin found furthermore, that while the absolute delicacy of touch varied in different persons, the relative delicacy was constant in the same parts of the same person. Children, owing to the greater crowding together of the sentient points; women, on account of the softness, smoothness, and greater vascularity of their skin; and the blind, in consequence of great practice and from concentrated attention, have a very delicate sense of touch. R. Lichtenfels discovered that the use of atropine, daturine, morphine, strychnine, and alcohol, blunted this power, enlarging the *circles of perception* or *areas of confusion*, mapping off the surface of the body into an irregular mosaic; and Wundt and Bertheau finding this to be so during the progress of certain cases of paralysis, proposed to use Weber's com-

passes as an æsthesiometer. Volckmann remarked next that by incessant practice the limit of confusion could be reduced to one-half or one-quarter of its primitive value, and, as Weber observed, this increased delicacy actually extends to the part which, though actually unexercised, is situated symmetrically, e. g. from the left to the right thumb.

1. The *Sense of Temperature* arises when the acting body is hotter than the normal heat of the human body; beyond a certain limit in either direction, a burning pain is produced, as is the case when a very cold or a very hot metallic body is handled. Our discrimination of temperature is affected by the rapidity of the changes, the extent of skin surface involved, its thinness and richness in nerve-terminations and vessels. In the following series established by Weber, the most sensitive parts come first: the tip of the tongue, the eyelids, cheeks, lips, neck, trunk, etc. Owing to the thinner epiderm and more extended surface, water, which feels quite hot to the legs, is readily supported by one finger unless it is moved about. For cold water seems colder, and warm warmer, when the hands are moved in it, than when they are kept motionless, in the latter the water acquiring the heat of, in the former case communicating its own temperature to the skin. As in the similar case of tactile discrimination, the left hand and side, having a thinner epiderm generally, have a more acute power of appreciating temperature than the right, and in either case practice and concentrated attention refine the sense very much. According to A. Fick and Wunderli very feeble tactile and temperature excitations may very readily be confounded with one another. Ritter discovered under certain circumstances the action of very strong galvanic currents on the skin excited during their continuance, or at the instant the circuit was completed or interrupted, a sensation of either heat or cold as the case might be.

2. The *Sense of Weight*, or *Pressure*, is the power to estimate the amount of a force compressing or stretching the skin during the total absence of any muscular action, i. e. of what is termed the *muscular sense*. Weber found that he could distinguish between two weights bearing to each other the ratio of 19.2 to 20, or even 29 to 30, when laid on the finger-tips, whereas on the middle of the forearm the ratio had to be 18.2 to 20, and on the brow 18.7 to 20. The delicacy of this estimation is much greater when the impressions are *successive* than when they occur simultaneously, provided that the separating interval does not amount to forty seconds, though it may to twenty. According to Kammler the least weight perceptible on the finger-tip is 0.005 to 0.015 gramme; but on the finger-nail one gramme, that is fifteen grains. There is a certain relation between the sense of temperature and that of weight. Thus, Weber found that cold bodies seemed heavier than warm ones of actually the same weight. The *Muscular Sense*, in conjunction with the sense of pressure, enables us to form accurate conclusions as to the weight, consistency, resistance to rupture or overturning, etc., offered by the bodies we are handling. Thus, a truncated cone set with its small end on the hand laid passively on a cushion, feels heavier than when its large extremity is thus placed, whereas on poising it in the hand no such error is committed.

In the general use of an anæsthetic at first there is increased cutaneous irritability, succeeded by analgesia; the patient sees and feels the cutting of the knife, but suffers no pain, and his muscular sense is still active. Later voluntary and reflex action cease and organic etherism comes on, marked in the beginning by the lowering of the animal heat, then by stoppage of respiration and hæmatosis, and lastly by death supervening on paralysis of the heart. The return to the normal state obtains in the same order, but reversedly.

Kraue, while agreeing with Weber that the superficially seated bodies of Meissner are for the perception of temperature, chiefly though not exclusively, affirms in addition that the more deeply situated bodies of Paccini are for the sense of weight, and the hairs for that of localization and the detection of mere contact. Thus Aubert and Kammler remarked that pressure, to be perceived, must be greater on a part that has been shaved than on one that has not, and in fact they considered the tactile bodies to be aborted hairs. Mr. Broughton found that while a kitten could readily thread blindfold its way out of a maze, in which he had designedly placed it, as long as its whiskers were intact, it utterly failed to do so when these were shaved off. Spiess, Aubert, Kammler, Schiff, &c., believe that the muscular sense is really situated in the skin, and Krause that the bodies of Paccini are the organs mainly concerned in it. Brown-Séquard, however, has shown that while the sensitive nerve fibres, giving rise to the other senses, cross in the spinal cord, those regulating the muscular sense cross in the medulla oblongata like the other motor nerve-fibres. Calmeil, Bouillaud, Gerdy, Flourens, and Longet, have shown that the removal of the two cerebral-lobes does not impair the general sensibility; while Flourens and Brown-Séquard, in opposition to Gerdy, Bouillaud, and Longet, assert that in this case, the power to perceive impressions is abolished, so that the spinal cord is not a true sensorium.

In foot-sleep, the touching of the limb causes an unpleasant prickling and quivering, like a feeble induction shock, and the same occurring in hemiplegia we see why the rubbing in of ointments is here so disagreeable. As Leyden remarks, Weber's method was intended to measure the delicacy of tactile discrimination and not the degrees of alteration of the sense of touch, which consists of two elements—the locality feeling and absolute sensibility—having no definite and constant relation to one another. Thus, when disease advances slowly, the locality feeling, being so largely a thing of practice and attention, may remain intact, though the psychological impression it excites may, from want of absolute certainty, be only a more or less clever guess. Hence, in pathological cases we must measure not only the locality feeling, but also the degree of absolute sensibility. Puchelt was the first to describe what is styled *partial sensitive paralysis*. He found cases in which the temperature sense was intact, while that of tactile discrimination was much impaired. Eigenbrodt remarked that patients suffering from mechanical or pathological alterations of the spinal cord, had lost the sense of weight. Lastly, Leyden discovered that in grey degeneration of the posterior columns of the spinal cord, while the muscular sense, owing to the integrity of all the motor apparatus, was intact, and the sense of temperature nearly if not completely so, the absolute sensibility was much impaired.

Hyperæsthesia, then, is the peculiar state in which the absolute sensibility is increased—the minimum of stimulation needed to excite perception being less than normal. *Hyperalgesia* is where stimuli which normally cause only a slight sensation, give rise to pain in consequence of the lowering of the pain minimum. Sometimes the minima of perception and pain coincide together, in which event the first is lowered, while the second remains normal. This *relative hyperalgesia* is quite common in disease of the spinal cord. *Positive* hyperalgesia also probably occurs in neuralgia, hysteria, injuries of the spinal cord, etc. *Retarded nerve conduction* also obtains in grey degeneration of the spinal

cord, but has yet to be studied. Lastly, we have what may be termed the *sense of direction*. The tactile sense, when operating by itself, and not corrected by the sense of muscular effort called forth to antagonize it, always suggests the idea that pressure is made vertical to the surface. Thus it is that when the hair of the head is pulled, we know the direction of the traction. But if we hold the head of the person operated on steadily between our knees, and prevent the traction from calling forth the muscular action of the scalp, by pressing firmly with the fingers around the point from which the hair is pull d, the patient cannot tell from what direction you pull his hair.

The interpretation put by our minds on tactile impressions, is in part the result of intuition and in part that of practice. Thus, intuitively we refer the impression made on any part of a sensitive nerve, to its peripherical expansions, or (as in the case of amputated limbs, etc.) to the regions in which these should normally be situated.

Leaving our present topic, we next pass on to the consideration of the so-called *sympathies*.

One of the most important attributes of the nervous system, is that of—1. Linking together the different tissues endowed with the properties of animal life, through the interposition of the nerve-centres—the impression carried thither by the *peripherical, incident, or eisodic* nerves being handed over in a new physiological or psychological form, to the *excentric* or *exodic* nerves—the whole constituting Marshall Hall's *diastaltic arc*—the summit of which is the nerve centre. 2. That of linking together the organs of vegetative life by themselves, or else with those of animal life; the spinal cord being the centre and the great sympathetic the branches of the diastaltic arc. The transference in the grey matter of the spinal cord through the intervention of the nerve-cells, of the irritation brought there by one sensitive nerve-fibre to another of the same kind, is called *co-sensation* or irradiation; while that passing from a sensitive to a motor nerve-fibre, or *vice versâ*, is termed *reflex action* (motion or sensation, as the case may be), and from a motor to a motor nerve *association of motion*. *Reflex actions* (of Prochaska and *excito-motory* of Marshall Hall) are divisible into: 1. *True reflex* or *diastaltic* actions, or those belonging in particular to the organs of animal life: 2. *Organic* or *sympathetic reflex actions*, or those appertaining to the organs of vegetable life (nutrition and reproduction).

Sympathies are then reflex actions in which an inconscient impression, transmitted in general by the branches of the great sympathetic to the spinal cord, gives rise there to an involuntary motor action, carried to other regions by motor nerve-fibres generally divided from the sympathetic, though sometimes also from the nerves of animal life. This motor incitation transmitted to the smooth muscular fibres of the blood-vessels of the part, or to those of the excretory ducts of glands, or to those of the walls of the intest nal tube or of the heart, gives rise to diverse interesting phenomena.

All the organs and living tissues have a mutual and regular coördination, so that one part is weakened by the increased action of another, i. e. normally, equilibrium of action obtains. In addition, each of these organs or tissues exerts on one or more other parts, a special influence more marked and frequent than that common to the rest of the economy. This is what is termed the doctrine of *territorial influence*, or of the *neuro-vascular areas*. If this reaction of one organ or tissue on another obtains by the exercise, and for the accomplishment of their respective functians, it is termed *synergy* or *coöperation*, as in the case of the glans penis and the testicle during coition; whereas, if this occurs between two organs not having any direct physiological relation, it is styled *sympathy*, as is seen when sneezing results from a strong irritation of the retina. Now we have sympathy:

1. Between the different parts of an organ or tissue, and this explains the spreading of an erysipelas from one part of the skin to another; and the changing of a coryza into a pulmonary catarrh, or a diarrhœa, etc.

2. Between paired organs. Thus, when one eye is diseased, the other, though not directly acted on, is soon involved by sympathy, and the same is true of the two ears, lungs, kidneys, etc.

3. Sympathy between one organ and another of the same apparatus. When the uterus, as in pregnancy, takes on increased activity and development, this reacts on the mammæ and sebaceous glands. In fact, the secretion of milk is the effect of the normal or pathological excitation of the genital apparatus. Thus, in man it occurs when there is sarcocele, or other diseases of the testis. Again, acne, which is a disease of the rudimentary milk-glands, the sebaceous follicles, obtains mainly during the period of great genital activity. The French term them *boutons de sagesse*, or pimples of chastity; and they generally disappear after marriage. According to J. Frank, though the skin of eunuchs soon acquires the wrinkles and sallowness of old age, they enjoy a remarkable immunity against cutaneous affections.

The nerves of mucous membranes are generally derived from the sympathetic, except where skin passes insensib'y into mucous membrane; and here alone is it that ordinary sensibility exists. Thus, the urethra, except in disease, is not very sensitive beyond the glans penis, and the rectum beyond the anus. The greater sensitiveness of the orifice as compared with the rest of the mucous membrane with which it is in such close sympathy, is very available for counter-irritation in the treatment of various affections of the mucous membranes and their annexes. Thus it was that Bichat proposed to treat ophthalmia rather by producing an artificial coryza than by blisters or setons to the neck or temple. Similarly, we have the treatment of cutaneous diseases by purgation, excessive costiveness being so often a prominent feature in them; and the relief of toothache by placing an irritant in the external auditory meatus. Again, Brown-Séquard has shown that the sudden introduction of cold water into the external ear excites an epileptiform convulsion; and we know how that sometimes epilepsy is associated with dental caries, and that certain shrill sounds excite the sensation called *setting the teeth on edge*.

4. Sympathy between an organ of one apparatus and that of another. Thus during digestion, while the gastric and intestinal glands are most active, the sweat-glands, according to Sanctorius, are nearly inert. Again, when a cold body enters the stomach at a time when the skin is bathed in sweat, the sweating soon ceases; whereas warm teas favor sweating. Tickling the soles of the feet sometimes causes nausea, and even syncope; and Bichat thought that in hemiplegia, or hypochondriasis, etc., it was possible, by repeating the tickling several times a day, to get a stronger and more enduring effect than the merely temporary one following the use of blisters, especially as, unlike the latter, it acts exclusively on the nervous system. Now, as the action of the surface is diminished when there is internal inflammation, by increasing the action of the former, we remove or lessen that of the latter, and hence the use of counter-irritation. However, issues do no good unless somewhat painful or in the condition of healthy ulcers. Nevertheless, the issues should not be too painful, nor kept active too long; for after they have removed the

inflammatory action below, they still combine to act on the parts, lessening their action; and thus stop or impede the proper operation of the healing process.

Lastly, it has long been known that when any particular action disappears suddenly from a part, it will often quickly affect that organ which is most in sympathy with the part or organ originally diseased. Hence it is, why the spontaneous appearance of an extensive eczema often coincides with a favorable change in phthisis, and its disappearance (so called *retro-cession*, or *repercussion*, or *driving in*) with an unfavorable one.

These facts show how it is that the knowledge of the special sympathies between different organs and tissues explains the causation and location of disease, and shows where remedies are best applied.

NITROUS-OXIDE AS AN ANÆSTHETIC, WITH REPORT OF SEVEN CASES.

By CHARLES F. TAYLOR, M.D.,

NEW YORK.

The recent death, at Bellevue Hospital, of a patient while under the influence of chloroform, occurring, as it did, without the omission of any precautions, and in spite of the most intelligent and persistent efforts to sustain animation, will no doubt have a tendency to deter a still larger number of practitioners from the use of chloroform as an anæsthetic. But an anæsthetic we must have. The ability to annihilate pain and prevent muscular action during surgical operations is an incalculable blessing to the world, and it were even better to run all the risk there may be in the use of chloroform than to attempt to get along without anæsthesia. Ether has some serious objections. It is very unpleasant, especially to children; is frequently slow to act, and sometimes is impotent altogether to produce insensibility without carrying it to an imprudent degree. Besides these objections, though considered entirely safe, it often leaves the patient in a state of great prostration.

Under these circumstances, I have thought that my experience in the use of nitrous-oxide as an anæsthetic might be of some interest at this time.

Case 1.—This was an operation for anchylosis of the hip-joint. Tenotomy and very strong efforts to extend the thigh were made, occupying about five minutes—the patient, a girl of thirteen years, being in complete anæsthesia, and in as favorable condition as could be asked. She was brought under the influence in about one minute, and passed out of it in about the same length of time. No ill effects followed.

Case 2.—This was a simple operation to extend the knee by dividing the tendons of the hamstring muscles. It was chiefly remarkable for the rapidity of the whole operation, the little patient, a boy seven years old, not being quite two minutes unconscious.

Case 3.—This was an operation for deformity of the hip-joint, in a lady of twenty-two. In this case our attempts to produce unconsciousness by the use of ether—carefully administered by Dr. Vermilye—were unsuccessful. The most persistent efforts for over one hour failed to produce the desired effect. We found afterwards that the ether used was not good, but the quantity given was very great. Again we resorted to the nitrous-oxide, and in about forty seconds there was complete anæsthesia. The operation, which was division of the sartorius, occupied one minute, and in thirty seconds more the patient was as well as if nothing had happened.

Case 4.—This was a very interesting case of so-called "hysterical joint," affecting the shoulder, in a very susceptible lady, followed by partial anchylosis. Three years before, I had operated on the right shoulder, assisted (as in the case first related) by Dr. Peaslee, but there was such complete prostration afterwards from the ether, that she was confined to the bed for more than a month, and it was fully two months before she recovered from the shock. Three years afterwards I was sent for to perform another operation for the same trouble, which had returned this time in the *left* shoulder. The dread of the operation, or rather of the effect of the ether, was so great, that it had been put off till all motion at this joint had ceased, though the adhesions were readily broken up. But the prostrating effects of the anæsthetic were even greater than before, and she was not able to get up from her bed till nearly all the benefits of the operation had been neutralized by the long confinement. When, at last, she did get up, she was so pale and feeble that I abandoned the idea of employing ether, and again resorted—after unsuccessfully endeavoring to get along without further operation—to the nitrous-oxide. The success was all that could be desired. There was no prostration whatever following the operation, and the next morning she came down to breakfast, feeling as well as ever.

Case 5.—About a week afterwards I again operated on the same case, with the same happy escape from the prolonged prostration which had invariably attended the use of ether.

Case 6.—This was a case of deformity, requiring division of the flexors of the thigh, in a feeble girl of nine years of age. It was rapid, and not attended or followed by the slightest shock or unpleasant symptoms.

Case 7.—This was an operation for club-foot, and like the previous case, was characterized by the completeness of the anæsthesia and the absence of all ill effects following it.

In the first five cases the gas was administered by G. R. Colton, by means of a large rubber bag, with a single mouthpiece, the expired breath being thrown into and mixed with the gas in the bag, which formed the next inspiration. Although the administration of the gas was successful as above related, yet I was always anxious about the venous, partially asphyxiated appearance of the patient, which made us cautious about using it in operations requiring much time. This appearance I believe to be due more to the imperfect method of administering the gas than as inseparable from this method of producing anæsthesia. Accordingly I embrace an early opportunity of employing a method devised by Mr. Blakeney, a physician in Twenty-second street, near Sixth avenue, which entirely avoided breathing over any of the expired gases. His method consists of forcing the gas forward under pressure through a tube, with a valve which opens on inspiration and closes on expiration, and the breath passes out through another tube in the open air. In fact, the patient breathes pure gas all the time. Although there seems to be no danger from the former, yet I greatly prefer the latter method, and shall henceforth employ it. It will be seen that I have no experience as yet in nitrous-oxide as an anæsthetic in operations requiring more than five minutes to perform.

To sum up, I would enumerate the following advantages of nitrous-oxide over ether, viz. 1st. The rapidity of its action, causing the saving of time to physician and patient; 2d. Its agreeableness; 3d. The speedy passing off of its effect; and 4th. The absence of all after effects of sickness at the stomach, vomiting, headache, etc. Not one of all those cases complained of any unpleasant symptom whatever. Its disadvantages are—1st. The inconvenience of not always having it at hand when wanted; 2. The cost ($5.00) of having it brought to

you; and 3d. Its possible insufficiency or danger in prolonged operations. But for all short operations I believe nitrous oxide to be the best anæsthetic we have.

For all superficial operations, such as the opening of abscesses, etc., I have found Richardson's vaporizer to be amply sufficient.

AN ILLUSTRATION OF THE BENEFICIAL EFFECTS OF

ATOMIZED LIME-WATER IN MEMBRANOUS CROUP.

By H. ERNEST SCHMID, M.D.,

WHITE PLAINS, N. Y.

On the 22d of last November, I was called some three miles from my residence to see a little child, about 20 months old, who had been suffering with croupal symptoms for five or six days. Very slowly and gradually had they come on, so as not to give the mother any uneasiness; but had increased in intensity, day by day, in spite of the various remedies applied, until the child presented the alarming spectacle which had induced the parents to call me in, and which at once indicated a case of membranous croup, of the gravest aspect.

I ordered immediately the constant inhalation of the vapor of hot water and Dr. Leaming's mixture of chlorate of potassa, muriate of ammonia, senega, etc.

When I paid my second visit, on the following day, the little boy was evidently more comfortable. He had coughed up a large piece of false membrane, and the shrill, brassy inspiration was materially softened.

Becoming engaged in an obstetrical case of uncommon severity, I was unable to see my little patient again until forty-eight hours later. I found him then in an almost hopeless condition. His labored breathing could be heard outside the house. He had grown so unruly that his nurses had ceased to apply the steam, and were awaiting with resignation his death, which seemed speedily approaching. He lay with his head thrown far back, his lips deeply cyanotic—in fact, his entire surface showing in its dusky hue the fearful extent of the deficiency of arterial blood, his pulse small, and beyond counting.

I had seen the piece of membrane, coughed up by the child on the second day of my attendance, dissolve in lime-water as readily as any diphtheritic deposit; and I determined now to give the little sufferer, as a last chance, the inhalation of atomized lime-water. In fifteen minutes from the time I had begun to let the spray play over the mouth and nose of the child I perceived, with heartfelt satisfaction, that my efforts were beginning to be crowned with success. The harsh, metallic breathing grew softer, and at last melted down as if hushed by a magical power, the cyanotic hue gradually disappeared from the face, and before I left the house a moribund condition was exchanged for one of hopeful expectation. A relay of nurses kept up the lime-water spray, without ceasing, the rest of the day and the following night, so that, to my extreme gratification, I found my little patient, on my visit early the next morning, sitting up in his cradle, quite contented with the supply of air drawn in through his nostrils. It was now more difficult to make him breathe the spray. I exhorted the attendants, however, to the utmost perseverance, and left, delighted with my success thus far. But, on the following day, I found almost as bad a state of things as at my first visit. The glass tubes (of the spray-producer) had become choked up by the deposit of lime from the lime-water, and would work no more; the child had thus been without the spray for at least eighteen hours, the parents not taking the trouble to inform me at once of the fact. I hastened back to my office, substituted india-rubber tubes for the glass,—the former having a much larger bore,—returned to my little charge, and again had the satisfaction of procuring him speedy amelioration of his urgent symptoms. From this time he steadily improved, and, after the persevering use of the atomizer for three more days, I dismissed him from my list perfectly cured.

FEBRUARY, 1867.

ADVENTITIOUS GROWTHS OF THE UTERUS.

NEW FORMATIONS OF CONNECTIVE TISSUE.

(Being a Translation from the German of "Klob on the Pathological Anatomy of the Female Sexual Organs.")

By JOSEPH KAMMERER, M.D.,

AND

B. F. DAWSON, M.D.

NEW YORK.

The new formations of connective tissue which take place in the substance of the uterus are developed from its interstitial tissue, and in their growth affect either the whole extent of the latter, or isolated portions of it, in a diffuse manner; or these new formations, becoming independent, are situated under various circumstances in circumscribed portions of the uterine substance; or, lastly, they are considerably separated from the rest of the tissue of the organ. According to these different relations to the parent tissue, these varieties of new formation of connective tissue must severally be considered.

DIFFUSE GROWTH OF CONNECTIVE TISSUE IN THE UTERUS, ENGORGEMENT, CHRONIC INFARCTUS OF THE UTERUS (*Kiwisch*).

In consequence of formative irritation, especially when it has existed for a long time, the whole uterine connective tissue sometimes proliferates either without accompanying increase of the muscular substance, or, if this does occur, the connective tissue predominates to such an extent that the muscular substance is comparatively of not much account. By this process, an increase of the substance of the uterus is produced by a portion of its tissue which, as regards function, cannot be considered as the most essential to the organ. I therefore do not hesitate to classify this affection with the qualitative alterations of formative irritation, inasmuch as the natural proportion of the normal tissues constituting the uterus is thereby considerably altered.

In this disease the uterus is uniformly increased in its diameters, though not always in all of them; its body and fundus generally assume a spherical shape, and frequently attain to the size of a man's fist, and even larger. Its walls are sometimes considerably increased in thickness, up to twelve or fifteen inches, especially the posterior one and the fundus. The cavity of the uterus is absolutely enlarged, chiefly elongated; but the uterine walls lie close together, and an increase of its cavity, in the general meaning of the term, is only met with in rare instances; I should rather say that the cavity of such an hyperplastic uterus was relatively smaller than that of a normal one. Exteriorly the fundus uteri appears rounder and broader, the anterior and s ill more the posterior walls thickened, the latter even vaulted or of the shape of a boat's keel, the cervix more ample and increased in substance, and the vaginal portion broader and thicker.

The condition of the parenchyma of the uterus varies according to the duration of the disease. In the first stages it is more succulent and turgid, owing to the immatured condition of the newly formed connective tissue. The longer the duration of the disease, the more

is the mucous connective tissue transformed into the fibrillary variety, accompanied with contraction of tissue; the parenchyma on section appears white, or of a whitish-red color, deficient in blood-vessels from compression of the capillaries by the contraction of the newly-formed connective tissue, or from partial destruction or obliteration of vessels during the growth of tissue; the firmness of the uterine substance is increased, simulating the hardness of cartilage, and creaking under the knife. The newly-formed tissue is chiefly composed of thin fibrils, deficient in nuclei, which cross the uterus in lines of various breadths in all directions, forming a complicated felt-like network, and constituting the greater substance of the uterus. In the first stages of the disease the muscular fibres are broader and hypertrophied, but at a later period may be completely lost in the proliferation of connective tissue.

The causes of this diffuse growth of the connective tissue must be sought for in habitual hyperæmia, and I cannot concur in that explanation which interprets the process described as chronic inflammation. It is true that inflammatory derangement of nutrition is often followed by proliferation of connective tissue, but it is impossible to conclude that from the continuance of this formative irritation, derangements of nutrition are produced, the essential characteristics of which are destructive.

Diffuse growth of connective tissue constitutes the so-called induration hitherto considered as a result of parenchymatous inflammation of the uterus.

Frequently, however, this proliferation of connective tissue is developed after repeated deliveries in rapid succession, without any previous or existing inflammation; it also occurs in many displacements of the uterus, especially those in which venous reflux is hindered, in consequence of traction of the uterine appendages. When tumors exist, especially fibrous, proliferation of connective tissue almost always coexists in the rest of the uterus. When the uterine cavity is distended by accumulated mucus or menstrual blood, this proliferation generally exists in the form of eccentric hypertrophy. Finally, it is often combined with the various tractions to which the uterus is subject, and sometimes is developed in consequence of the puerperal condition.

From the description of this affection, it is evident that the term "infarctus," used by some gynocologists, is absolutely improper. For reasons mentioned, I would also advise the disuse of the term "chronic inflammation."

In most cases, the mucous membrane of the vagina participates in the chronic irritation; we frequently find it in a state of epithelial desquamation, and even of catarrh and blennorrhœa. The peritoneal covering of the uterus is generally thickened and covered with various-shaped false membranes. The pampiniform and utero-vaginal plexuses are often in a varicose condition, and this is not only caused by the contraction of the newly-formed connective tissue, and consequent occlusion of the blood-vessels, but is also frequently the consequence of the same cause which produced the diffuse growth of the above tissue.

Besides local hyperæmia, we must take into consideration the general causes of this affection; thus it is often found complicated with diseases of the heart. Scanzoni calls particular attention to the fact that proliferation of connective tissue repeatedly occurs after successive miscarriages, and is also said to occur in prostitutes.

When diffuse growth of the above tissue does not take place uniformly in all parts of the uterus, hyperæmic distension of its blood-vessels is apparent in those portions not at all or only slightly affected, and in these parts extravasations may occur, especially in the external or internal layers of uterine tissue (Scanzoni).

The consequences of the above-mentioned pathological conditions are derangements of menstruation and sterility. As regards their termination, it must be noted that in the majority of cases the proliferation gradually ceases after attaining a certain degree, and no further alterations of tissue take place. In other cases, at the climacteric period, involution occurs, commencing generally by distension of the uterine cavity, with an accumulation of mucus. What has been said by various authors on the relations of diffuse growth of connective tissue to the development of carcinoma, must be considered as a mere hypothesis; this same question has been raised in regard to other organs in which carcinoma is developed from an hypertrophy of tissue, and in a great many cases it must be left to the discretion of observers whether they will classify certain cases with carcinoma.

In the preceding description I have only spoken of that proliferation which uniformly affects the entire interstitial connective tissue of the uterus; we shall next consider the equally important *analogous* conditions which only affect portions or layers of the uterus.

Original Lectures.

SCROFULOSIS AND TUBERCULOSIS.

BEING A LECTURE BEFORE THE CLASS OF

THE JEFFERSON MEDICAL COLLEGE.

SESSION 1866–7.

BY S. H. DICKSON, M.D.,

PROFESSOR OF THEORY AND PRACTICE OF MEDICINE.

PART II.

FROM what has already been said, we can account for scrofula very extensively; but there is a certain prevalence of scrofula difficult to account for. It is stated by Doran, that there are thirty-nine families in Europe out of which crowned heads are chosen; you may remember it as the number of stripes given the Israelites—forty save one; of these, twenty-five are affirmed to be positively scrofulous. Why should they be scrofulous? They feed sumptuously, they are clothed in purple and fine linen, they are magnificently sheltered, and live under as good hygienic rules as are practicable; their children are not badly reared; royal females bring up their children well; they are taught gymnastics, riding, shooting; care is taken to bring them up with a view to their physical development—yet they are scrofulous. We must go far back to the original stock, when they were not in this condition. The house of Hapsburg is famous for its thick lip—and a thick lip is said to be one of the characteristic marks of scrofula. The house of Brunswick, which occupies the throne of Great Britain, is known for many years to have been subject to scrofula. We owe the fashion of wearing high stocks to a Duke of York, who endeavored in this way to hide the glands of his neck and the results of ulceration. There is nothing in the habits of these families which produces scrofula, nor has there been for a generation or two back. Some even go so far as to allow but a single healthy family to exist on a European throne, and this is the superior race in power, the house of Hohenzollern, on the throne of Prussia.

As a general rule the crowned heads, the royal families, are at one end of the scale of humanity, the poor artisans in the manufactories at the other; and thus we have an exemplification of the old proverb that extremes meet. Something must be owing to climate. Almost all the crowned heads of Europe are derived from Germany; it were easy to suppose, then, that there is something in temperament and individual constitution, for the individual constitutions of that race present certain peculiarities; they are fair-haired, with blonde complexion and blue eyes; and thus we have imbibed the idea almost universally acknowledged, passing from book to book, with very little doubt or hesitation, expressed with great stress, meeting with no denial, that scrofula especially attaches itself to the light-haired, the blue-eyed, the blonde complexion. Certainly the rule is not absolute; a crowd of instances to the contrary present themselves to my recollection. Whether from crossing, or otherwise, Holmes observed in this country, and it has been observed, too, in Europe, that this fair race is decreasing in numbers, and the dark complexion, the black-bearded races, are predominating over the entire world. In the various miscegenations taking place, this seems to be the prominent type, which will prevail ultimately everywhere; the other type dying out, perhaps from weakness originally, and therefore the more readily deteriorated. Hybridism, or crossing, has been supposed to be the cause of many evils; but on the other hand, we are warned that the marrying in and in is productive of great evils. Several writers on both sides of the Atlantic, on this side Prof. Bennis, now of New Orleans, ascribe much of tuberculosis and scrofulosis to the marrying of relatives—physical incest, as it is called. I think the truth can be put in a nutshell. I suggest it to you; there is a great deal of exaggeration on this subject, yet there is much reason for the belief that the intermarriage of relatives is dangerous to the offspring, not on account of their mere consanguinity, but because they are likely to have the same predisposition to scrofula if that predisposition exist in that family. The healthiest and hardiest race in the world, and one of the best intellectually, D'Israeli says *the* best intellectually, are the Jews. Brace says, they are divided into two races, the light clear-complexioned, and the dark race. They have kept these peculiarities separate from the earliest times; they marry in and in, as we know; breed continually together. Jews seldom intermarry with the races among which they live. Gentiles seldom marry with the Jewish race. There are such exceptions and the intermarriage does not seem to be uncongenial; they form a good race, generally mingle well together. Here then, we have an instance of long continued intermarriage, of marriage of relatives, and without any deterioration. With regard to degeneracy in them, scrofulosis and tuberculosis are certainly not necessary results of their intermarriage.

Burton says, it is the same with the Arabs, and the Arabs are likewise divided. The Arabs are Ishmaelites, and they are divisible into two classes, the blue-eyed and the dark-eyed. Abd-el-Kader is blue-eyed and a blonde; yet some of his race are dark, even blacker than the Hindoo. These are closely intermarried—intermarried even among tribes, as we learn. Among the smaller tribes of Bedouins, all marry their own cousins—there are no others to marry—yet physically they are a fine race, athletic, energetic, active. What can you desire in physical health and development more than they possess? Consanguinity is not therefore among them necessarily followed by degeneracy. We are told the same thing of the inhabitants of a certain part of France. The Basques and Bretons marry their cousins and kindred habitually, and there are no degeneracies of any kind, physical or mental, among them.

Therefore we come to the conclusion that it is not an essential result of marriage of consanguinity, that there should be scrofulous or other degeneracy. Why then does it often happen, for there is no doubt that it does often happen, that marriages of consanguinity are followed by physical or mental degeneracy? Because, if there is any predisposition to disease in a family, the female will have it as well as the male; if then, under such circumstances, two cousins of similar scrofulous predisposition marry each other, it is certain the offspring of these cousins will be more scrofulous than their parents; but it is not so by the law of consanguinity. For suppose two persons scrofulously predisposed, of the most distant and diverse race, marry, the result will be just the same without the slightest consanguinity. It is due to the predisposition and not to the blood. It is, for this reason, more apt to be encountered among married relatives; but it is not essential, it is not a law. If two cousins are healthy and see fit to marry, there is as much reason to believe that their children would be healthy, as if they were not connected by cousinship or consanguinity at all. If the temperaments be opposite, it will be as favorable a conjunction as if they were not connected. If we could manage these things as the stock-breeder does with the lower animals, undoubtedly we could improve the human breed to a great degree.

As the scrofulous diathesis discloses itself, we find a universal predisposition to various phenomena, various morbid manifestations of the skin, the eye; the bones themselves becoming soft. Rickets we scarcely know in this country, though frequent in many other parts of the world. Softness of the bones of various kinds, spina bifida, etc., the child being born with the defect. This has led to another suggestion. We cannot readily cure this terrible form of disease in a given individual, but we can prevent it in the offspring by removing the cause. The defect of lime is said to be the cause. Mouries discovered that the milk of women in the city of Paris contained less of earthy salts than the proper proportion. Now in defects of the kind we are speaking of the earthy salts are wanting too, and acting on the suggestion resulting from this investigation he found that by sending the children out of Paris, and by procuring for them the milk of country women, this difficulty was abated; and the result has been, that at the present day very few children in Paris are nursed by their mothers. We learn that this is really so from works of fiction, from poetry, in sadder numbers than are recorded in our medical books, for it has produced a sad state of morals in that city. Stone, of New Orleans, believes that in all scrofulous and tuberculous cases, the phosphate of lime is an excellent remedy. Many others have maintained the same thing. Lime salts are necessary to remedy this defect, and the want of the lime salts in the maternal parent is one of the modes of accounting for the presence of the disease hereditarily.

Have we any mode of treatment for scrofulosis? Are there any means of cure? Any articles of diet that will prevent it?—How shall we treat scrofula? Take any of its manifestations. One of the most interesting is the affection of the cervical glands. You find a child beginning to show a ready swelling of the lymphatic glands anywhere, no matter where; you find children very liable to enlarged tonsils, to irregular irritative diarrhœa, to sore throat, to glandular swellings externally, to swelling of the lymphatic glands everywhere, under the arm in the axilla, along the bend of the arm; you will be able sometimes to trace from a slight blow,

a swelling of the duct along the whole arm up to the axilla, inflamed, uneasy, sore to the touch. All this liability depends on a certain hereditary predisposition. Iodine is proposed for these conditions, and the various modes of administering iodine are now among the favorite remedies. I do not believe it to be so generally and universally applicable as has been supposed. For instance, to a true development of scrofulous degeneracy it does not seem to me to be very applicable. Marasmus I hold to be one of these manifestations. A child thus affected will begin to swell with a sort of general, irregular, knotty hardness of the belly, and at last you will find the mesenteric glands quite enlarged. This goes on to an enormous extent. I have seen in one child an enlargement, a mere tumor, an immense mass of these glands, agglutinated together as large nearly as his head; you frequently find them as large as the fist. It is a common thing to say there is tuberculous deposit in these cases; I have never seen it. Lloyd describes the manner in which the glands of the neck are thus changed; hyperæmia first shows itself; the glands are in a state of determination, a stagnation of blood soon followed by inflammation, then there is exudation, but not of the kind to be described as tubercular; it is a thin curdy fluid which will sometimes form a cavity—like an abscess; but sometimes the inflammation is of ordinary character. I have repeatedly opened these glands in the neck, when I found pus as laudable in appearance as any surgeon would find in a common phlegmon. At other times it does present a curd or whey-like separation of a fluid, thin stripes of pseudoplasm, with a turbid serum.

Iodine seems very readily to affect the external glands. I don't think it relieves the tonsilitis, or the hardness, redness, and induration of the tonsil, which by and by causes necessity for extirpation; nor does it seem to benefit the subject of mesenteric glandular swelling, which is entirely out of the reach of iodine.

Mercurials, which I object to, and dislike to use under all other conditions of scrofula, which I think rather tend to irritate and disturb a scrofulous constitution otherwise affected, seem to be essentially necessary; and yet you must avoid with great care the local irritation and inflammation, the buccal and parotid inflammation likely to be produced. Mercury must be used in small quantities. Without it I do not think you will relieve a child from this sort of irritation; marasmus, as it has been called, a wasting away, a very rapid atrophy of the whole body, shows itself, and the child emaciates in proportion to the enlargement of the glands, from the injury done in the general disturbance of the assimilative powers of the constitution, which is coincident with the mesenteric swelling. I have opened these swellings after death and found them in the state which Lloyd describes as existing in the glands of the neck. I have never seen the yellow tubercle in any of these glands; I have seen the white curdy matter which may be, I don't think that it is, identical with the grey matter of tubercle. These two subjects, scrofula and tubercle, run together inextricably at certain points, but they are not identically the same conditions. I would rather let alone even inordinately swollen cervical glands in a scrofulous subject. I do believe there is something favorable, on the whole, in their appearance, whether it be metastatical, as Parrish believed, by saving other parts; or whether it shows a not quite so great degeneracy of constitution, attacking external glands instead of internal glands, I am not prepared to say. It is a better condition of things than internal manifestations; frequently they remain indolent at a certain point for a long time. Let them alone; follow the practice of one of our late physicians who advises you "if it lets you alone, let it alone." They frequently disappear of themselves, subside readily; and thus is accounted for, the value of the "royal touch," which is one of the earliest superstitions we know of. If we trace its history closely we find that it was employed among barbarous nations. Vespasian was supposed to have this power of gracious touch, by which he also relieved blindness and paralysis, etc. "*Stitim conversa ad usum manus ac cæco dies relaxit*," says Tacitus: "the hand recovered its power and the day returned to the blind." Laird tells us that Knig Olaf, one of the earliest Norwegian kings, had this singular power. He took a piece of bread, rolled it, made the form of the cross, put it in the mouth of the patient; he then stroked the neck and the glands disappeared, and thus he showed the royal power he derived from heaven. We know that the kings of England employed the royal touch, and the queen down as late as the time of Dr. Johnson. We know of other persons who have enjoyed this power. Valentine Greatrakes has left a name in history on account of the number of cases that occurred under his hands.

Scrofulous persons, therefore, grow up very often in good health, get rid of the scrofulous affection of the eye, of the skin, and of the glands.

Internal scrofula is not so readily got rid of; nor are the scrofulous affections of the bones. Toynbee says that the general deafness met with in cities, especially where ochlesis prevails, is also a scrofulous affection. Iodine is used in all these, and in all the external manifestations it seems to be singularly applicable. Whether goître is one of these or not is much disputed. I think it is, for it is much under the influence of iodine. How shall the iodine be administered? There are many modes. I prefer Lugol's solution, very weak; a grain to the quart of water, and administered in doses of a wine-glass full two or three times a day. Thus you avoid the irritative absorption of healthy glandular structure which sometimes follows the administration of iodine. The deutiodide of mercury and potash is one of the best preparations and very effective. All the salts of potash are serviceable, upon a particular view which Garrod gives us. He says all the alkaline salts tend to promote the natural metamorphosis of tissue going on in the system; that under the influence of the alkalies there is a more ready metamorphosis of the less vital tissues, less vital deposits, less vital plasma, and of course the deposition forming the glandular and other swellings of scrofula. I have no doubt he is right. A combination of salts, such as we have in sea-water, I have found excellent. Recent sea-water, every day, in small quantities, will improve the health. All the natural impregnations of mineral waters which go to assist the metamorphosis of tissue are beneficial, and upon that general principle. I know no other to guide us; there is no specific unless iodine is a specific; but it acts, I think, on this general principle of Garrod.

With regard to the diet much may be done. Bennet suggested long since that such depositions are chiefly albuminous; many books call them fibrinous; but there is very little difference between the two in our view. In either case it will be of great consequence to avoid albuminous food. Bruce also says that they contain too much caseine among the proteine compounds. Bencke confines his patients to a diet of whey; subtracting from the milk the whole of the albumen, leaving the sugar and other ingredients, getting out the curd, he gives the whey. It is said that the cures under his hands have been marvellous. Very little bread is allowed, great quantities of whey being drunk. Even the manifestation of tubercle is said to disappear under this regimen.

Reports of Hospitals.

JEFFERSON MEDICAL COLLEGE

OF PHILADELPHIA.

SURGICAL CLINICS OF PROFESSOR GROSS.

WEDNESDAY, Dec. 19, 1866.

Enlarged Prostate.—A. G. M——e, æt. 61, presents himself for examination. He has had vesical trouble for six years; passes urine several times during the night, and two or three times in the day-time; this is not accompanied by a scalding or burning sensation. Introducing the sound into the bladder, it passes very high up, and over a very rough surface; the finger in the rectum discovers an enlarged prostate, which condition was sufficiently diagnosed by the fasciculated condition of the bladder. The bladder is much thickened. There is a partial paralysis of this viscus most probably, and its interior is very much enlarged, admitting the exploring instrument even to its very handle. The urine should be examined as to its quantity and quality; as to whether it is unnaturally acid or alkaline, or contains an unusual amount of mucus, or contains any phosphates, urates, or any other deposit; whether it contains any pus, etc. A great deal of information is to be obtained in this way before we can reach an accurate diagnosis; but the cause of the entire difficulty is enlargement of the prostate gland, leading to mechanical obstruction to the egress of the urine, and to hypertrophy of the walls of the bladder.

Such a disease is incurable. All that can be done is to palliate the symptoms and relieve the suffering of the patient to the extent to which that can be done. We cannot remove this hypertrophy. Hydrochlorate of ammonia, iodide of potassium, bromide of potassium, and similar articles, have been employed internally with this view. Of these remedies the hydrochlorate of ammonia is preferable. Sometimes suppositories may be introduced with advantage, but this is about all that can be done towards relief. The application of leeches to the rectum and vicinity, the application locally of iodine, etc., all prove inefficient; and whatever we may try, we find at last that nothing can be done to diminish permanently the size of the organ; and as long as the obstacle to the egress of the urine remains, just so long must the difficulty in the bladder remain.

In the present case (the patient has never had retention of urine) there is paralysis; the bladder is not able to contract well upon its contents. He will be directed to take one drachm of Tr. secale cornutum, with twenty drops of the Tr. ferri chloridi four times daily, adding ten drops of the Tr. cantharidis—another excellent remedy in these cases of incontinence of urine where there is paralysis of the bladder. Secale promotes muscular contraction of the muscular fibres of the urinary bladder; cantharides acts specifically on the urinary passages; and the tincture of the chloride of iron also acts on these organs, and is an excellent tonic besides; and therefore, the combination is a proper one under the circumstances.

The bowels are to be kept in a soluble condition, with an efficient purgative occasionally. The diet is to be simple and nutritious.

Another Case of Enlarged Prostate.—This is in a deaf and dumb gentleman, who presents himself for relief from incontinence of urine. He is wearing an ordinary urinal, in which the urine is received as it flows, and from which it is emptied at convenient periods by turning a stop.

There is another contrivance much superior to the ordinary urinal, which was originally worn by Mr. Head, a man with a congenital extrophy of the bladder. In these cases of extrophy, the anterior wall of the bladder is deficient, and the posterior wall protrudes so that the openings of the ureters can be distinguished. After wearing a great variety of instruments for the purpose of collecting the urine, he finally had an apparatus constructed which runs along the inner side of the thigh, and the reservoir is long and slender, and is attached above to the pubes, while the tender tumor is covered by a protector, and the urine, as fast as it passes off from the ureters, is received in the reservoir, and conveyed along the instrument, where it is retained, and evacuated by means of a screw, several times a day.

This patient was examined with the sound without finding a stone, and as in the previous case, giving evidence of an enlarged prostate gland. There is precisely the same condition of the bladder as in the other case; it has become fasciculated from irritability. The probability in the present instance is that the middle lobe of the prostate forms some mechanical obstruction to the evacuation of the fluid, leading to paralysis of the bladder, and incontinence as a result. Very frequently the enlargement exists both on the part of the lateral lobes, and of the middle lobe; at other times it exists in one or in both lateral lobes; and occasionally, exclusively, or nearly so, on the part of the middle lobe. When the middle lobe is enlarged, then a projection resembling much the uvula is formed, which serves as a mechanical obstruction to the evacuation of the urine, and there is no particular remedy unless we cut it off, or seize hold of it with a loop of wire, and get rid of it in that manner. A good mode would be to get in to the bladder in a manner similar to the lateral or median operation of lithotomy, and then to snip off this middle lobe; there might be a little bleeding, but not to a serious extent, and thus we might dispose of this body which we cannot get rid of by any medication. This operation would be safer than to seize it with the écraseur.

When there is enlargement of the lateral lobes, one or both, equally or unequally, then the passage is very much narrowed, and we can literally do nothing—because we have no remedy to relieve hypertrophy of that organ.

In the present instance, various remedies have been employed, none very persistently, and the consequence has been that the patient has not experienced much relief. The excoriated condition of the penis in this case would lead to the inference that the urine is acid, and the prescription will consist of tr. ergot ℥j. three times daily with soda bicarb. grs. xv. to each dose; with the introduction every night at bed-time of a suppository containing one-half gr. of morphine rubbed up with ℥j cocoa-butter. This treatment will be continued for ten or twelve days, in the hope of affording considerable relief.

Occlusion of the Urethral Orifice.—John M——y, æt. 11, has had great difficulty in passing water for about a year. The orifice of his urethra is barely distinguishable. The prepuce has become firmly adherent to the head of the penis, from inflammation produced by irritation of the prepuce, due to a want of cleanliness. When the sebaceous matter in this situation is allowed to accumulate it is very apt to excite inflammation, and if the patient is too young to know the importance of ablutions, it may lead to the present state of things.

In operating for the removal of this difficulty, enlarging the orifice and separating the prepuce from the glans, a strong membrane, apparently fibrous, was found

stretched over the meatus urinarius, and the adhesions were very firm. An affection of this kind will lead to disease of the bladder and ureters; it may lead to calculus, from collection of the salts of the urine as a result of the difficulty in micturition. Hypertrophy of the bladder is a common consequence of this condition.

Progress of Medical Science.

Diphtheria.—Dr. E. S. Gaillard, Richmond, Va., in a Prize Essay on Diphtheria, comes to the following conclusions:—"That diphtheria is a zymotic disease; peculiar, separate, and specific. That its pathology proves it to be a distinct disease. That its anatomical and physiological relations appertain to no other disease. That it is both epidemic and sporadic, in its prevalence. That its etiology is obscure and in no respect understood. That its symptoms and course render its diagnosis and differential diagnosis simple. That it is often contagious; but not so always. That its duration, in the acute stage, is from three days to three weeks, and when its peculiar sequelæ ensue, that the disease may persist for many months. That hygienic influences seem not to affect the cause of the disease; but that they do affect its course and result. That its relation to age is marked and direct; that children are its most frequent subjects and its most frequent victims. That its complications are numerous and most of them dangerous. That there is no direct relation between the throat lesions and the result. That it is peculiarly apt to recur; and that convalescence from its attacks is slow, tedious, treacherous, relapsing, and interrupted. That there seem to be diseases coincidently occurring in the lower animals, during its prevalence. That its sequelæ are peculiar and such as are not seen after any other disease. That its mortality, when uncomplicated, is not serious; but that its frequent complications render the mortality severe. That the chief cause of death is laryngeal implication, and next to this asthenia. That the prognosis can seldom be satisfactorily made. That, in no disease, does treatment more generally influence the result. That the autopsies prove (what is indicated by the pathology, the anatomical peculiarities, the symptoms, and the sequelæ) that diphtheria is a zymotic, distinct, and specific disease. After a careful analysis and patient tillage of this field; after freely consulting all familiar with its cultivation, we now offer to our fellow-laborers the results of the harvest: 'Corn from the sheaves of science,' with the stubble, produced to sustain it."

Menstruation in the Male.—Dr. V. O. King reports (*Southern Journal Medical Science*) a very curious case of simulated menstruation in a male. The subject was a fellow student at the University of Louisiana whose intimate acquaintance he first made during the month of December, 1855. He then learned that the gentleman had been the victim of this vicarious function for a period of three years, eliminating an apparent catamenial secretion, with the same regularity and attended with the same indications by which it is characterized in the human female. The fluid exuded flowed from the sebaceous glands of the deep fossa behind the corona glandis, and was of a sanguineous appearance, homogeneous, and thick. The quantity of this exudation varied from one to two ounces during each hæmorrhagic period, and the duration of the periods from three to six days. The subject was then twenty-two years of age, of a lymphatic temperament, and had never been contaminated with venereal disease. Though not prone to the indulgence of lustful passions he was not innocent of having sometimes yielded to their promptings, which were especially potent immediately preceding his periodical purifications.

Incontinence of Urine Successfully Treated with Extract of Belladonna.—A healthy looking country girl, fourteen years old, was brought by her mother to the *Metropolitan Free Hospital* on the 11th of January last. She had suffered from nocturnal incontinence of urine for the last two years. Not a night passed without her wetting the bed, and to such an extent that she had been compelled to lie upon straw covered with a sheet in order to change her bedding daily. She had been taken out of bed at night, scolded, and ridiculed, without any effect in making her abandon the habit. Dr. Drysdale ordered her a quarter of a grain of extract of belladonna as a pill, to be taken at bedtime every night. On the 15th of January her mother came to say that she had not wetted her bed since taking the medicine. Up to the 18th of January there was no return of incontinence of urine. Dr. Drysdale remarked that he had in many cases seen similar results from the use of belladonna in this disease, and supposed that the drug acted by paralysing the detrusor urinæ muscle.—*Lancet.*

Detection of Strychnine.—It frequently occurs that when strychnine is mixed with organic matters—as usually happens in medico-legal cases—though the ordinary tests may be applied without much difficulty, it is by no means easy to detect the crystalline form of the alkaloid. A suggestion lately made in the *Chemical News*, by Mr. Blunt, appears of some value. He says that the granular masses of the alkaloid which are seen in organic mixtures containing strychnine may be converted into exquisite stars of crystals by the addition of a drop of sulphuric acid, if consisting of one drop of strong acid in five of water.—*Lancet.*

Trichinosis.—A committee appointed by the Medical Society of Vienna, and composed of Professors Klob, Muller, and Wedl, has just published a long report on trichinosis, in which the startling fact is asserted that the real source of infection lies entirely in the rat, in which the malady is spontaneously developed, and which communicates it to the pig. In Moravia, eighteen out of forty-nine rats examined were trichinized, a proportion of nearly thirty-seven per cent. In Lower Austria the proportion was not more than four per cent., and in the environs of Vienna about ten per cent. The report confirms the fact that trichinosis may be transmitted by food, from the rat to the rabbit, from the rabbit to the fox and hedgehog, from the rat to the pig, and from the pig to the rat. Even the calf may be infected by being fed with the flesh of trichinized rabbit. What is worse still, the larvæ of flies feeding on infected meat will transmit trichinosis to rabbits, provided the larvæ come fresh from the infected substance; for if a certain time be allowed to pass, the trichinæ soon die in the digestive tube of the larvæ. It is important to notice that the report distinctly confirms the innocuousness of trichinized meat when thoroughly salted, smoked, or boiled, the latter process being by far the most efficacious. Meat roasted for three-quarters of an hour is safe food; boiling requires a whole hour. And yet the report mentions cases of infection recently observed in Austria, so that means should be taken there to protect the public from this disastrous malady. The first measure proposed is the extermination of all rats and mice, but not without previously examining them, in order to ascertain the existence of trichinosis among them. If this examination should lead to affirmative results, then particular care should be taken in the locality to

keep pigs away from all sewers, heaps of manure, and other such places frequented by rats. The flesh of the pig should be examined either after death, or even during life, by means of incisions. The infected pig should be separated from the others, marked, and its sale prevented. Special slaughter-houses should be organized for pigs, and the flesh examined by veterinary practitioners; and the public themselves are warned never to eat raw pork under any form, but strictly to consume it only well salted or smoked, boiled or roasted.—*Exchange.*

Eye-washes containing acetate of lead have been found to produce a precipitate of chloride of lead upon the cornea which renders it dim, and forms erosions upon it by destroying the epithelium. The ulcers which are formed are very obstinate, and a condition of things is induced far worse than the original trouble for which the lotion was prescribed.

Excision and Regeneration of the Entire Clavicle.—J. W. Irvine, L.R.C.S., Edin. (*Lancet*), reports a case of excision and regeneration of the entire clavicle of a lad aged sixteen. The necrosis of the clavicle which necessitated the operation, was caused by severe osteitis following rheumatism. On admission to the West Derby Union Hospital, June 18, the patient was much exhausted; there was a constant purulent discharge from a wound which left an inch and a half of the central portion of the right clavicle bare and dead. He continued to lose flesh until the 2d of July, when abscesses began to show themselves near the sternum and scapula. This latter circumstance decided the surgeon to operate.

Chloroform having been administered, an incision was made over the entire length of the bone, and then, as far as possible, the periosteum was dissected from its superficial surface. Then the sterno-clavical end was disarticulated, and a spatula so placed as to elevate the bone, and allow of an easy separation of the periosteum. The operator found it necessary to dissect with extreme care owing to the painful perceptible pulsation of the subclavian artery, but with perseverance he managed to remove the clavicle comparatively free from its periosteal covering. During the removal, hæmorrhage occurred from seven sources. Three vessels were controlled by torsion, and he found it necessary to apply four ligatures. The wound was brought together by eight wire sutures; the arm was confined at right angles across the chest by means of bandages, and cold water dressings were applied. No secondary hæmorrhage occurred, and in a week the scapular end of the wound had healed by the first intention, and the arterial ligatures had been removed. The abscesses which had threatened to point near the sternum and scapula had discharged themselves at the line of incision. The sternal end of the wound, which was healing by the granulating process, had a tendency to gape, but filled up very satisfactorily; the patient being confined to his right side, and having his head thoroughly elevated. On September 1, two months after operation, the entire wound had cicatrised, and the patient had gained in weight. He had been able to sit up, and use his arm in playing dominoes, for ten days past.

On September 20 he expressed himself as quite able to follow his employment, and as it was evident that the clavicle was being regenerated he was discharged with the caution to use the arm of that side tenderly. The operator, in commenting upon the case, remarks, that an examination of the clavicle after removal convinced him, and every other surgeon who saw it, that any operation short of entire extirpation would have proved unavailing. The scapular end of the diseased bone, especially its under surface, was found to be most affected, but the sternal end was considerably disorganized. The articular surface of the sternum was healthy. On the 31st of December, six months after operation, he had an opportunity of seeing the patient for the first time after his discharge, and found that he had meanwhile been actively employed at his own business, and had for some weeks been able to use his right arm as perfectly as ever. Occupying the place of the resected clavicle is a new bone, of rather beyond the normal length, and considerably wider, but more flat and thinner, than the original one. This regenerated clavicle played its part with perfection, allowing the boy to use his arm as efficiently as though no disturbance of the parts had taken place. It was interesting to him to notice the accuracy with which the limits of attachment of the clavicular muscles could be clearly defined when muscular efforts are made.

Repeated Resection of the Knee-Joint.—Several cases have occurred in which delay in healing, and the evident occurrence of necrosis after resection, has rendered a second operation necessary. At *King's College Hospital*, under such circumstances, it is thought better to repeat the resection rather than to amputate the thigh. Sir William Fergusson has had three or four such cases, which have done well; and Mr. H. Smith had one in which the proceeding answered perfectly. On Saturday last Mr. Smith again adopted the plan in the case of a lad whose knee-joint he had excised in July last. The boy went on well at first, then fell back, and was sent into the country for a few months—not to much purpose, however, for sinuses about the wound persisted, and showed the presence of dead bone, and the boy's health was suffering from the prolonged irritation. On opening up the wound, firm anchylosis was found to a limited extent between the femur and tibia. Lying behind the former bone was a ragged sequestrum, an inch or two long, representing the intercondyloid space of the femur—that portion of bone which is so often exposed to necrosis. There was an abscess in the head of the tibia. Mr. Smith removed a thin section of this latter bone and a portion of femur, and brought the bones into apposi ion again just as in ordinary resection. When the sequestrum came to be examined, an old arterial ligature was found lying about it. This must have been accidentally dropped into the wound in July last, at the time of operation, and there it had since rested. Was it the presence of this piece of string which excited inflammation leading to the death of the shell of bone described?—*Lancet.*

Narceine.—The employment of narceine is becoming very fashionable in France, morphia being in the meantime thrown virtually aside. It is said to possess the property of producing a tranquil sleep, at the same time none of the unpleasant effects belonging to other narcotics are felt on waking. It has another valuable property of not interfering with the regular and normal action of the bowels.

For Relaxed and Elongated Uvula.—A correspondent of the *Lancet* calls attention to the beneficial effects of the local application of a strong solution of sesqui-chloride of iron to the throat in cases of relaxation of the uvula. It should be applied twice daily with a camel's-hair brush.

A Cause for the Inefficiency of the Davy Lamp.—The evidence given in regard to one of the recent colliery explosions in England shows that the men were in the habit of smoking in the pit, and that they carried duplicate keys, by which they opened the safety-lamps.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & Co. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA

New York, April 15, 1867.

THE CONVENTION OF MEDICAL TEACHERS.

A CONVENTION of Medical Teachers, in accordance with the recommendation of the American Medical Association, is to be held in Cincinnati, on the 3d of May next. The object of the meeting is a thorough revision of the present system of medical college instruction. The committee appointed to carry out the spirit of the resolution have issued the call, and have propounded certain questions which they desire the several delegates to consider, and be prepared to act upon.

The first subject to which they are asked to give attention, is the establishment of a uniform and just rate of lecture fees. It is well known that many of the eastern colleges have increased their rates during the past season, while others have chosen to adhere to the old price. The experiment has received a fair trial, and the results must prove the wisdom or folly of the change. We are not among those who are disposed to cheapen medical science, and are in favor of teachers being decently, in fact well paid; but at the same time the students should have a decent show. If those attending lectures have been satisfied, as may be shown by their coming out in numbers proportionate to former years, there is no argument against the adherence to the present rates; but if the reverse can be demonstrated to be the case, some compromise must be settled upon. As far as we can learn, however, those schools which have raised the tariff are satisfied with their course, and are willing to urge every reason in favor of its universal adoption; maintaining that any lack of attendance can be explained by other causes than those which refer to a mere advance of thirty or forty dollars on former years. It is probable that the arguments of these gentlemen will have merit enough to convince other members of the convention of the practicability of their plan. If they succeed, a settlement upon a uniform rate of charges will not be difficult. But after all, the matter is not of much importance, only as it bears upon another question, which is advertised to be presented, viz. the increase of the lecture term, and of the number of professorships. The adoption of such a measure would certainly involve an increase of expenditure, and would necessitate a proportionate increase in lecture fees. This must be the main ground upon which its justice is to be founded. If the teachers promise to extend the lecture season and increase the number of professorships, it is but right that their patrons should stand ready to help them pecuniarily; but if no increased advantages are offered, they should show some very good reasons why they cannot adhere to the old prices.

The propriety of increasing the lecture term has been already discussed in our columns. We have taken occasion to raise our voice against the miserable cramming system involved in the giving of six lectures a day, and to urge the practicability of having but three or four. There is no earthly reason why the course should not be nine months instead of five. The professor may do the same amount of work in that time that he now performs in a shorter one, the only difference being, that by allowing time for the student to digest what he has heard, he can do proportionately more good. But we cannot dilate upon this point without the risk of repeating views already familiar to our readers.

If the lecture term be extended, the increase in the professorial corps can naturally follow. In fact the agreement to the first proposition would be absolutely necessary, unless the poor victims of over-lecturing are to be crowded still more. The increase in the number of professors would hardly involve the necessity for more than one to each branch, unless a more systematic course of instruction than is now followed out, is agreed upon. This would seem to be the intention of the committee, in an invitation to a consideration of the third question, in which they urge the "adoption of measures for securing more thorough attention on the part of students to the more elementary branches of medical science, and a more progressive order of medical studies." The only way, in our opinion, this can be done, is by a regular division of the class into yearly grades, the adoption of which measure we have, in a preceding number, taken pains to urge upon all the medical colleges. The reasons for our convictions have been, we think, fairly presented, as affording the best means for properly regulating the studies of the different branches. If the medical class is divided into first, second, and even third course students, it may then be requisite to have two, or even three professors; but in that case each teacher should have his own pupils, so that any of his peculiar views may not be combated by his confrère.

The proper discussion of the question in reference to the establishment of a more progressive order of studies, covers considerable ground. In the first place, the propriety of establishing recitations is one which should be considered as having a very important bearing, and in the second place, the necessity of having examinations for the different grades. Recitations should be regularly carried on, and no student should be allowed to pass into a higher grade until he has given satisfactory evidence of his fitness by a sufficiently rigid test.

The proposition to exact attendance upon three annual courses instead of two, is one to which the attention of the convention should be seriously directed. We cannot see what objection there can be to its unanimous adoption; the majority of the students are already in the habit of attending three courses instead of the two which they are compelled to. The only difference it would make to them by extra attendance being compulsory instead of a matter of choice, would be the increased expense which such a regulation might involve. But this can be reduced to the minimum by the colleges, especially if most of the course be devoted, as proposed, to clinical instruction. It could, in fact, be so arranged that an extra pecuniary outlay would be uncalled for.

Lastly comes the subject of preliminary education. We are glad to see that the committee has the hardihood to propose the question and rank it in equal importance with the preceding ones. If they had left this out, a general discussion upon college education would be without much practical result. The committee do not, we imagine, intend to do more than make a beginning in this matter. The regulations cannot, to start with, be very stringent. The young men who are candidates for the study of medicine should not be startled with the announcement that unless they are versed in the dead languages, and proficients in those other branches taught in our literary institutions, they cannot enter a medical college. It would be much better for the science if some such regulations could be adopted, but in the present state of affairs we must look at such a culmination of our hopes as afar off. But how is a beginning to be made? Simply by insisting at first upon a reasonably low standard; by the establishment of a code of requirements which shall be rigidly and impartially adhered to. By so doing, those proposing to enter upon the study of our art can be made to understand that the portals of our colleges are not open to every blockhead who may have money enough to purchase his tickets. After a while we can gradually increase the stringency of our demands and eventually equal those of the colleges of Europe. Let us be satisfied at first with a little, but let us have that little at all hazards.

There will probably be a multiplicity of topics growing out of the subjects which are to be presented by the committee; but with these we have nothing at present to do. We only desire, in the cursory review of the subjects proposed by the committee, to offer a few suggestions upon the pursuance of a course which will meet with the support of the majority of the profession. There can hardly be a doubt that the convention will be a large one, and that every medical school in the country will feel enough interest in the objects of the meeting to be represented by delegates. If we are right in our conjectures, and the meeting be, as we hope it will, a harmonious one, the members will have the opportunity of settling many points which have heretofore remained unsettled from the lack of a properly recognised power to take them in hand.

Not only do we hope this meeting will be well attended, but that out of it may grow a regular organization of medical teachers, which shall be an auxiliary of the American Medical Association, and shall meet as often as occasion may require to discuss all matters relating to medical education. The establishment of such a society would in fact be the only means we at present can have of raising the standard of medical learning. We may exact this and that at our medical organization, concerning what college shall and shall not do; but what does it avail us if the professors refuse to comply with our demands? If, however, we have a recognised association of teachers who understand what is to be done, and who agree to act in accordance with their convictions, we shall have something tangible upon which to rest our hopes of radical and practical reform.

THE Society for the Prevention of Cruelty to Animals seems determined to stultify itself, not only in the eyes of medical men but of the public at large. No one seems proof against the misdirected zeal of its representative. Not long ago we had occasion to allude to an attack made upon a distinguished professor of physiology, of our city, for exercising unwonted cruelty upon animals which he experimented upon. The sensational breeze which this charge against that gentleman made in the public prints was happily of short duration, in consequence of the very sensible and able defence that was made. But the indefatigable chairman of the association has seemingly not been contented with this rebuke, and we find him drawing his quill against another party, upon an equally frivolous and unfounded pretence. It seems that a certain party complained, in the sentimental style peculiar to abnormal tender-heartedness, that the well known manager of a museum was in the habit of feeding his snakes with live rabbits, which were thrust into the reptiles' cage. This seems to have been enough to arouse the champion of animal rights, and a correspondence was at once commenced. The showman was not backward in his reply, and proved, as any one could easily do who was acquainted with natural history, that it was necessary to feed these reptiles in the way he did. Not wishing to rely upon his own opinion he solicited that of the distinguished savant, Agassiz, who gives the following amusing and suggestive reply: "I do not know of any way to induce snakes to eat their food otherwise than in their natural manner; that is, alive. Your museum is intended to show to the public the animals as nearly as possible in their natural state. The society of which you speak is, I understand, for the prevention of *unnecessary* cruelty to animals It is a most praiseworthy object, but I do not think the most active member of the society would object to eating lobster salad because the lobster was boiled alive, or refuse roasted oysters because they

were cooked alive, or raw oysters because they must be swallowed alive." If similar senseless exhibitions on the part of the attacking party are made, the public will eventually look upon the society in the same way as the profession have been led to do, and much distrust will be engendered as to any of the real benefits which might grow out of a proper direction to its efforts.

We are glad to notice that the enormity of the crime of abortion is beginning to attract the attention of those laymen whose opinions upon moral and religious questions command the respect of the community. The *North-Western Christian Advocate*, of Chicago, in a well written, elaborate, and truthful article, fearlessly commences the discussion of this subject. This is the first instance in our knowledge in which a religious paper has dared to give the theme a fair and full notice, and it is to be hoped that the community to whom the remarks are addressed, may receive them in the same spirit in which they are given. The example of this periodical should be followed by others, as by the proper presentation of the ample facts in the case it will undoubtedly be productive of great good.

Reviews.

The Indigestions; or Diseases of the Digestive Organs functionally treated. By Thomas King Chambers, M.D., Honorary Physician to H.R.H. the Prince of Wales; Consulting Physician and Lecturer on the Practice of Medicine at St. Mary's Hospital; Consulting Physician to the Lock Hospital; Author of "Lectures, chiefly Clinical," etc. London: John Churchill & Sons, New Burlington street. 1867. 8vo., pp. 290.

The work before us, coming as it does from the pen of one of the most accomplished authors of Great Britain, cannot fail to be received with favor on this side of the Atlantic. Any one who has read Dr. Chambers's "Renewal of Life," will be prepared to learn that his remarks on indigestions are thoroughly practical, and full of most valuable suggestions. We have presented to us, first, an introduction, in which the importance of attention to the various phenomena connected with defective digestion is urged; and then follows the regular discussion of the subjects under the following heads: 1. Indigestion of various foods; 2. Habits of social life leading to indigestion; 3. Abdominal pains; 4. Vomiting; 5. Flatulence; 6. Diarrhœa; 7. Constipation and costiveness; 8. Nervous diseases, connected with indigestion; and lastly, an analysis of the whole work. The work is made up principally of a detail of well selected and typical cases, to each one of which are added comments purely clinical in character. The cases cover every conceivable grade of functional indigestion, from the slightest inconvenience after meals to that condition which actually ends the life of the patient. Every useful detail is faithfully figured, in order to carry out the evident design of the writer in making the work as complete and as thorough as possible. No practitioner can peruse it without benefit, nay, without comfort, for he cannot fail to find some of his most puzzling cases of indigestion explained in a clear, practical, and masterly manner. The different plans of treatment are rational, simple, and effective, and the reader is all the time made conscious that they are founded upon clinical experience alone. Associate with this the rare faculty which Dr. Chambers has of infusing an enthusiasm in his subject, and we have in this little work all the elements which make it a model of its sort. We have perused it carefully; have studied every page; our interest in the subject has been intensified as we proceeded, and we are enabled to lay it down with unqualified praise. It is just such a work as every practitioner should have, if he wishes to treat intelligently the majority of the patients who seek his advice. If the book does not prove a great success, and pass through several editions, it will be because the profession do not appreciate fine writing, sound philosophy, and sterling common sense. The work is got up in the usual elegant style of the London House from which it emanates.

An American reprint of this work has been issued by H. C. Lea, of Philadelphia.

The Renewal of Life. Lectures, chiefly Clinical. By Thomas King Chambers, M.D., Honorary Physician to H. R. H. the Prince of Wales; Consulting Physician and Lecturer on the Practice of Medicine, at St. Mary's Hospital; Consulting Physician to the Lock Hospital. Second American, from fourth London edition. Philadelphia: Lindsay & Blakiston. 1866. 8vo., pp. 640.

The title of this work is suggestive of its contents. The author starts with the assumption that disease is the result of defective vital action, and that the business of the physician in treating it is to renew that action. The first chapter, which is a condensation of two introductory lectures delivered at St. Mary's Hospital, on the Relations of Death and Life, lays an excellent foundation for the treatment of the different diseases touched upon in the rest of the work. The author likens the human body to a stately mansion, the different parts of which are constantly undergoing a decay, with greater or less rapidity. In order to keep this beautiful edifice in repair, the wasted materials must be regularly and persistently supplied. This power is known as health; a want of it, disease; and a total cessation of it, death. Life, then, rests upon the power to renew the materials of the body.

In speaking of disease and the importance of associating it in the mind of the physician with defective vital action, he says: "He must look at his pharmacopœia with this thought constantly present before him, with an eye to the ultimate benefit of the patient to a goal beyond that of the immediate effects. He should make his chief thought how each of the re-agents employed will finally touch life; whether they are calculated to add to or diminish the vital functions, to add to or diminish the vitalized substance of which his patient is made; whether by temporarily diminishing the functions or substance he may not remove an impediment to their balanced actions, so as to lead to a final increase, or whether this artificial diminution of functions or substance may not become more permanent, and inflict permanent injury on his patient. The final goal of life-renewal must be consciously or unconsciously in the heart of the physician or in the heart of his guides, otherwise I am sure that he contributes more to the ill health than to the good health of mankind."

This belief of the author is the result of logical deductions from an extensive clinical experience, as will be seen by a careful perusal of the different diseases which are treated of. The remarks upon his cases are so practical, his associations of cause and effect so minute, his plans of treatment so simple, the descriptions so graphic, and style so attractive, that the reader is only made to regret that the range of subjects is not wider, and that the work is not a complete treatise on the

practice of medicine. We cannot too strongly advise every medical man who wishes to acquaint himself more thoroughly with that system of therapeutics founded on the soundest philosophy, to possess the book' to study it carefully, and follow its precepts faithfully. We know of no production which will have a greater tendency to place rational medicine upon that elevated position which it is so justly entitled to.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, JAN. 23, 1867.

DR. H. B. SANDS, PRESIDENT, in the chair.

CARIES AT THE SACRO-ILIAC JUNCTION.

DR. F. H. HAMILTON presented a specimen of caries at the Sacro-Iliac Junction, with the following account of the case, furnished by his house-surgeon, Dr. D. M. Cory.

Catharine Bradford, æt. thirty-four, a native of Ireland, was admitted to Bellevue Hospital, November 26, 1866. She had enjoyed uninterrupted health up to the commencement of the illness from which she died. As far as could be learned she inherited no disease; nor could she recollect of ever having sustained a severe injury of any kind.

In June last she began to experience pain across the loins, especially when stooping, accompanied with lameness in walking. The pain was increased by efforts to turn in bed, or by lying upon the affected side. These symptoms became aggravated, and she at length noticed a swelling in the right lumbar region, which gradually increased in size to the date of her admission. When examined at this time it was large and fluctuating, and very near the surface. There were no abnormal projections along the course of the spine, nor was there tenderness, except over the last lumbar vertebra and the right sacro-iliac junction. She walked with very little difficulty; the little pain which it occasioned being referred to the sacrum; when she stood she leaned upon the sound limb, and kept the knee of the affected side slightly bent and abducted. A small opening was immediately made into the abscess, and its contents (dark and unhealthy pus) evacuated. By the probe a sinus, pursuing a very tortuous course, was discovered, leading apparently towards the vertebral column, but its precise origin could not be reached. She felt relieved after the abscess was opened, and in a few days was allowed to get up and walk about the ward. In a short time the discharge began to increase, and symptoms of consecutive fever became apparent. The pain, from which she had been relieved for a short time, returned, particularly in the course of the sciatic nerve and over the sacro-iliac junction. She could not lie upon the right side, but was quite comfortable upon her back, with her limbs in a straight position. An attempt was made carefully to dilate the sinus, by means of a tent made from slippery-elm bark, but owing to the irritation which it produced it was discontinued. On the second of January she had a chill, followed by a cold sweat; her stomach became very irritable. The discharge from the sinus diminished; chills, succeeded by cold sweats, occurred daily; and the general symptoms of systemic infection became fully established. In a few days her right leg became œdematous, exquisitely tender, and at certain points emphysematous. Effusion occurred into the knee-joint, and the integument around this joint had a dusky hue, which soon changed into a marked gangrenous appearance. The patient now became delirious, and in that condition died, January 11, 1867.

SECTIO CADAVERIS, EIGHTEEN HOURS AFTER DEATH.

Rigor mortis well marked; right leg swollen to double its size, and gangrenous.

Brain not examined; heart and lungs healthy. Abdomen.—The liver was fatty, and the seat of recent peri-hepatitis. This lesion was present also in the spleen. The kidneys were fatty, weighing nine ounces. The sinus, which had opened in the right lumbar region, was traced backwards, and was found to pass through the quadratus lumborum just above the crest of the ilium, and to lead to a large abscess posterior to the lumbar vertebra. A pouch communicating with this abscess had dissected underneath the fascia of the gluteus maximus muscle, and was connected to the latter by a sinus which passed over the crest of the ilium. In front of the vertebræ there was an abscess behind the psoas muscle, and within its sheath, which communicated directly with the sacro-iliac junction; the abscess extending downwards along the psoas muscle to its insertion. There was slight superficial roughness of the right transverse process of the fourth lumbar vertebra, at which point free communication was established between the lumbar and psoas abscesses. The anterior portions of the bodies of the last two lumbar and two upper sacral vertebræ were roughened, and the periosteum and anterior ligament were separated from them by a small collection of pus. The sacro-iliac junction was extensively diseased. The joint was loosened, contained pus and sequestra. Another opening was found, and near the bottom of the sacro-iliac junction, at the upper margin of the ischiatic notch. The bony walls of the first, second, and third sacral foramina of the right side, were roughened and partially destroyed. The lower lumbar and upper sacral nerves of right side were compressed by the thickening of tissues, and the pressure of pus around them. The psoas abscess, in its passage underneath Poupart's ligament, ran along the course of the vessels, between the tendons of the psoas and iliacus internus muscles. Nothing abnormal was found in the interior of the vessels of the thigh, but there was considerable inflammation around them, uniting them together. The cellular tissue of the thigh was infiltrated by purulent matter, and some gas escaped on cutting.

Dr. Hamilton further remarked—

The following conclusions may be drawn from the case:—

1. Disease of the sacro-iliac junction may occur in a healthy person without being traceable to any special injury.

2. The disease may make pretty extensive progress without materially affecting the general system, and without causing much, if any, lameness, or distortion of the limb.

3. The abscess consequent upon the caries may follow the course of the psoas magnus, entering the sheath posteriorly where the fascia is weak, and present itself upon the front or inside of the thigh; it may penetrate the quadratus lumborum, and passing outside of the sacro-lumbalis and latissimus dorsi, open upon the back just above the crest of the ilium, or it may dissect up the periosteum and fasciæ, and present itself at the sacro-sciatic notch, in the rectum, in the vagina, or anywhere in the perineal region, but especially near the point of the sacrum.

4. By descending between the sheath of the psoas muscle and the muscle itself, and thus not involving the substance of the muscle, it may not cause pain when

the thigh is straightened upon the body, or give rise to any other symptom indicating the presence of the abscess in the vicinity of the psoas muscle. And, inasmuch as an abscess, arising from caries of any of those vertebræ from which the psoas muscle has its origin, almost uniformly divides the head of the muscle, and thus penetrates into its substance, sometimes destroying it so completely that nothing but the sheath remains; therefore it may be proper to conclude, that in the case of a well recognised psoas abscess, the ability of the patient to straighten the thigh before the body without pain or inconvenience, might be regarded as pointing to its origin in its last lumbar vertebra, or the sacro-iliac junction; and that this circumstance might sometimes be employed as a means of diagnosis between a psoas abscess, arising from caries of the last dorsal, and from the upper lumbar vertebra on the one hand, and a psoas abscess, arising from caries of the last lumbar vertebra, or caries at the sacro-iliac junction, on the other hand.

Unfortunately it does not appear that any practical deductions as to the treatment can be drawn from this case; unless it be that, inasmuch as the symptoms became rapidly more serious after it was opened, life might have been prolonged by having kept it closed. It is possible, also, that if the diagnosis had been made early, by rest in the recumbent posture, and other appropriate remedies, the disease might have been arrested.

The rapid swelling, the pain, and the death of the right limb may be ascribed to pressure upon the sacral nerves by the abscess at their roots; by inflammation, extending from the abscess connected with the psoas muscle to the neighboring absorbents, veins, and arteries, to thrombosis, or to septicæmia. One, or all, of these several causes must have operated.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

STATED MEETING, MARCH 4, 1867.

DR. SAMUEL T. HUBBARD, PRESIDENT, in the Chair.

THE PRESIDENT announced that it had been voted to grant certificates of membership to Drs. Watts, Cady Livingston, Gerardus H. Wynkoop, F. Munson Cone, Alonzo J. Cassidy, Max Herzog, Albert O. Treat, and John Sidney Warren.

DISEASES OF THE MONTH.

DR. DUNSTER, of the Committee on Diseases, reported that the total mortality, 1,719, of the four weeks preceding February 23d, was somewhat less than that of the month previous, and than that of the corresponding period of last year. Zymotic diseases accounted for about one-fifth of the deaths; and under this head was noted a slight decline in the fatality from scarlatina, typhus, and typhoid, with an increase in that from diarrhœal diseases; whooping-cough and measles had been very prevalent. Under respiratory diseases, pneumonia alone was charged with 149 deaths, and bronchitis with 67, though this showed little change from the preceding month. Children had suffered severely, one-fourth of the whole mortality belonging to infants under one year, and nearly one-half to children under five. A remarkable immunity attached to the ages from five years to twenty. Genuine typhus had appeared, during the month, in several distinct and even widely separated localities; but it was believed to be traceable, in every case, either to recently arrived immigrants or to their associates at the benevolent lodging-houses where they find shelter. A very mild form of typhoid had been, for some time past, prevailing along the western shore of the city, only two cases out of fifty-six resulting fatally. During December last there occurred an outbreak of this fever at the Deaf and Dumb Institution. The inmates were dispersed to their homes, and the disease proved thereafter quite tractable, none of the numerous patients succumbing to it. The Institution was closed, and thoroughly renovated at an expense of some $20,000; yet upon its re-opening, the first of February, the fever reappeared. It is said that the mattresses upon which the fever-patients had slept, were not disinfected except by exposure to the air, and also that the privies were left uncleansed. These statements, if correct, may account for what would otherwise seem an extraordinary tenacity of the fever-poison in clinging to its old haunts.

The President announced the death, since the last meeting, of Dr. Wm. E. Stillwell, a member of the Society.

CHOLERA: IS IT CONTAGIOUS?

DR. WM. C. ROBERTS read an elaborate paper upon "The Contagiousness of Cholera shown from its Analogy to other Epidemics and the Laws of Specific Poisons." The essay, which occupied about an hour and a half in delivery, reviewed the whole subject of the communicability of disease, the writer fortifying his positions by extracts from numerous authorities, and the citation of a number of cases. Any abstract must fail to give an adequate idea of the paper; but we subjoin the chief points of the argument, as far as possible in its own words.

Specific morbid poisons, while exhibiting individual differences in their mode of action and of propagation, which determine their specific character, are yet generically allied. All epidemic diseases are due to such poisons, and show a similar generic likeness, the morbific principle being in general reproducible in the bodies of the sick, and so becoming animal, zymotic, and contagious. Every specific zymotic epidemic is necessarily contagious. Cholera is clearly a specific epidemic, and we have, then, only to show it zymotic in order to prove its contagiousness; and this whether the zymosis be intra-corporeal or extra-corporeal (perhaps intra-aerial). For though we may be constrained to admit some meteoratious epidemic influence to account for its rapid diffusion, yet this influence must depend for its activity upon the specific germ, which, whatever its genesis and its means of subsequent reproduction and convection, is still the essential element of contagion. Now that cholera is zymotic we may infer from its analogy to other diseases universally recognised as contagious zymotici. If typhus and small-pox are zymotic, how much more must this be, which surpasses them, as it does all other epidemics, as well in the swiftness of its march as in the violence of its attack, and our powerlessness to cope with it.

As to the mode of elimination of the poison, it is probable that, as in typhus, it is excreted most abundantly by the gastro-intestinal mucous membrane; so that fomites soiled with the alvine discharges are especially liable to communicate the disease; while the germs from the desiccated dejections may be suspended in the atmosphere, rendering it infectious. But we cannot allow that this is the only mode of elimination, nor that infection may not find its way through other channels. Facts do not bear out the conclusion that cholera is not communicable even by contact between individuals.

It is possible that the cholera-poison may even now be, at times, produced *de novo*, as that of typhus is believed to originate from ochletic miasm. But more probably both these and other specific diseases are, in the cases of apparently spontaneous origin, developed

from their proper virus, long dormant, but suddenly brought to light and aroused to activity by favoring conditions.

Voted that the paper of Dr. Roberts be accepted.

PROFESSOR FLINT, in rising to discuss the subject, said, that owing to the lateness of the hour, he should speak briefly and only upon important points. He should use the term "contagion" in its broad and popular sense, to denote the communication of a disease by a morbid product, either palpable or impalpable, produced within the body, though it would be well to limit the term to communication by a palpable virus, reserving "infection" for that by a poison which eludes the senses. The term "portable," for which we are indebted to the late Professor Mitchell of Philadelphia, had always seemed to him very good and convenient to express a cause that may be transported by "fomites," using this word as applicable not alone to clothing, but to anything which may carry the poison.

In considering a question of this character, we must be careful to free ourselves from the influence of the views that may chance to be at the time prevailing. The popularity of a theory, even within the profession, is very fluctuating, and can furnish no ground for an opinion. For instance, in the epidemic of 1854, very few believed cholera contagious, while now a considerable number seem to hold it such.

He did not feel like accepting the argument of the paper just read by the distinguished gentleman, that, because cholera is specific and epidemic and zymotic, therefore it is contagious. Influenza, and various other zymotic affections, with those endemic and zymotic, like yellow fever or cerebro-spinal meningitis, would hardly be considered contagious. Nor must we judge of the contagiousness of this, or of any disease, from special isolated facts, such as had been cited. As in theology it is easy to prove any dogma by isolated texts of Scripture, so in medicine one may easily find facts upon either side of a question in dispute. The recent report of the Registrar of Vital Statistics, would furnish an apt illustration. The fourth of the early cases of the epidemic of last season is recorded (*Report of Metropolitan Board of Health for* 1866, p. 169), as that of "the fearless and strong woman who washed the soiled clothing and bedding of her brother-in-law," and the impression is left that, in the opinion of the Registrar, this was the cause of her attack. Now turn to page 271 of the same report, where, in the paper of Dr. Yale, we have an account of the number of cases which occurred among all who were engaged in washing the clothing upon Blackwell's Island. He says:

"At the asylum were employed about twenty washerwomen; of these one had cholera. This is only five per cent., or a considerably smaller percentage than among those not so employed. At the work-house twelve washerwomen died, their places being supplied by others; the total number being thirty-four. This proportion (35 per cent.) is somewhat heavier than among those who did not wash. At the Almshouse the precise number of washerwomen attacked is not stated, but the washing is chiefly done by the nursery women from the wards 45, 46, 47, and 48, which have been already mentioned as having but four cases in all, which is certainly below the average. At the Penitentiary I neglected to inquire upon the point. At Charity Hospital no washerwoman was seized. The amount of danger from infected articles would, in all probability, be very slight where disinfectants were freely used; but for the first few days of the epidemic this matter was, in the main, overlooked, and full play was then allowed for the action of any infectious material."

Dr. F. had been in hospital service during the epidemic of 1849, and could say positively that at the institutions with which he was connected, none of those engaged in washing the clothing of cholera patients were attacked by the disease.

It is essential to settle the principles upon which, by means of aggregated facts, the contagiousness or the non-contagiousness of a disease is to be established. He would enumerate a few of the most important:

A contagious disease extends from the localities where it becomes established, through the proximate localities; and though it may gradually extend to those more or less distant, yet, in a certain proportion of these instances, it should be practicable to trace the contagion. This is certainly true of most of those diseases universally considered contagious, as typhus and scarlatina. How with regard to cholera? Upon this point the earliest cases in an epidemic are of the greatest value. Referring again to the Registrar's Report (*Op. cit.*, pp. 167–171), we find the history of the first nine cases of the late epidemic in this district, with dates and residences as follows:

April 30. Woman, Ninety-third street and Third avenue, died next day.

May 2. Woman, 115 Mulberry street, recovered.

June 3. Man, 303 Broome street, died next day.

June 6. Woman, same place, died same day.

June 9. Woman, West Twentieth street, fully two miles from any of the preceding.

June 9. Man, Hester street, laboring at East River.

June 11 Woman, W. Thirty-fourth street, between Fifth and Sixth avenues, had been visiting near Pitt and Willett streets, died 13th.

June 13th. Man, 51 Cherry street, died same day.

Same date, man arriving from Troy, breakfasting near Greenwich and Liberty streets, and visiting in Waverley Place, died same day.

These places are certainly sufficiently remote from each other, and from any probable common source of contagion. Were this wide separation of the early cases characteristic only of the last epidemic, it would be less noteworthy; but it is unquestionably true of the majority of epidemics. The speaker had had occasion in 1849 to trace the history of the epidemic at Buffalo, N. Y., where he there found the first cases occurring almost simultaneously in localities so far apart that it would have been impossible to admit any connexion between them. So far then as this ground is concerned, we find no evidence of the contagiousness of cholera.

A second important ground of decision is to be found in the number of persons who, coming from an infected district to a healthy one, are there attacked and become foci of infection. Now it is doubtless possible to collect a number of strong instances that seem to sustain the doctrine of contagiousness. But such cases are very few as compared with the great number where, under like conditions, no such result follows. It is true, this may be called negative evidence; but then it is possible for a vast amount of such evidence to outweigh positive evidence of doubtful character. For the cases relied upon by the contagionists are perhaps all capable of explanation by the theory of the portability of the special cause, without admitting its production in the human body.

Again: Of those brought into personal contact with the patients, is a larger proportion attacked than of those not so exposed? This Dr. F. deemed one of the strongest points; and he believed he was perfectly correct in saying that, taking a large collection of instances, a greater proportion of those brought into contact with the cholera patients escape the disease, than those similarly circumstanced who have no connexion with such patients.

Certain points connected with analogy are of some moment. Contagious diseases, except those of parasitic origin,—all zymotic contagious diseases, that is,—give, as a rule, immunity from a second attack; though this is also the case with some diseases not contagious, like yellow fever. If cholera were contagious, we should, then, expect this immunity as the law; but it appears to give us no such protection. Again, contagious diseases of zymotic character cannot, as a rule, be arrested. Probably no one present would doubt that we do have the means of arresting cholera; that it may be prevented by very simple means in the premonitory period; and that we are able sometimes to arrest it after it is fully developed. Another point would be barely mentioned: A disease properly contagious is not limited in its duration in a given place by any law. It continues so long as there are fresh subjects for it. But it is believed we all know the case is different with regard to cholera, which generally continues three or four months and then disappears.

In closing, Dr. Flint referred again to the Report of the Board of Health, in regard to the prophylactic measures employed under its direction. It is well known that disinfectants were used more fully and more promptly during the last epidemic than probably ever before; and the facts would seem to show that by their means we have the power not only of removing the predisposing causes of cholera, but even of destroying the special cause itself. This must not be construed into an admission of contagiousness; for there is no reason to suppose that the disinfectants may not be as efficient against poisons not derived from the human body as against those which acknowledge this source. If it be true that we have learned how to prevent this disease, we have made an immense advance.

Dr. Marx Herzog insisted that the question was one demanding the most rigid scientific investigation, and must be determined by reference to certain great natural facts which could only be settled by experts. The authority of such *quasi* scientific bodies as the International Commission at Constantinople was quite valuable; while the highest importance attached to the labors of men like Pettenkofer and Drasche, whom he was astonished not to have heard named by either of the gentlemen. To these men, indeed, more than to any one else, are we indebted for everything positively known upon the subject. Considering the discoveries already made, he had no doubt that within our own lifetime we should have the miasm made sensible to chemical or microscopic observation. He then gave an exposition of Pettenkofer's well known theory: that for the production of cholera the first requisite is the specific cholera germ. This exists most abundantly, though perhaps not solely, in the discharges of patients affected either with cholera or with choleraic diarrhœa. These discharges are harmless until they have undergone a certain putrefactive process, and again after this process has progressed beyond a certain limit—as clearly proved by Thiersch's experiments upon animals. The second requisite for the disease to become epidemic, is a favoring condition of the soil, which must be porous, and subject to changes of level in the subsoil water (ground-water). It is especially after the subsidence of this water that the organic matter left behind is in the proper state for the zymotic reproductiou of the poison. And here, as in the case of the discharges, the fermentation, once established, runs a definite and limited course, during which alone are the telluric emanations noxious. This theory was based upon very extensive observations made by the most competent men throughout the whole continent of Europe, except in France. Dr. H. regretted that similar observations had not been made here, during the late epidemic, particularly in regard to the varying level of the ground-water, which served to explain so many apparent anomalies. This point was of equal interest in epidemics of typhus. He exhibited a chart showing the relation of the level of the subsoil water to the prevalence of typhus, in a given locality, for ten years, which gave results strictly accordant with the above views. He was happy to be able now to correct the false impression that these fundamental laws had found an exception in a certain part of Austria; and the puzzling case of the pilot of the England had at last found a solution in the fact that his boat was towed near the ship's drain-pipe, where he was necessarily exposed to the effluvia from the decomposing discharges. Statistics of 15,000 or 16,000 cases in Germany showed that cholera does not twice attack the same person during the same epidemic. He would advise a man who had had diarrhœa, in a house where cholera had prevailed for sixteen or eighteen days, not to remove; as in that period the poison loses its power. For lack of time he would not read the paper he had prepared, but he had said what he deemed most essential.

Dr. Thoms called attention to the fact as shown by a chart prepared for another purpose, that in the twelfth ward, where the cholera-hospitals were located, the ratio of cholera-mortality to the population was nearly as great as in the fourth and sixth wards, where the class of people and the hygienic conditions were esteemed the worst. The cases in the hospitals themselves were properly accredited to their respective wards.

Dr. Alex. H. Stevens thought the discussion mainly a dispute about words. It does not follow, because cholera may not be communicable in the same manner as small-pox, that it is not contagious. As well deny the contagiousness of syphilis, because we do not catch it in walking the wards. Every poison has its own laws of communicability, which must be met, for it to produce in any case its specific effects.

The President announced that at the next meeting Dr. Fowler would read a paper upon a subject connected with cholera.

By courtesy of the Society, Dr. Hubbard, of Illinois, exhibited a truss of his own invention, for which he claimed several points of superiority.

The meeting then adjourned.

EAST RIVER MEDICAL ASSOCIATION.

Stated Meeting, March 5, 1867.

Dr. V. Morse, President, in the Chair.

(Continued from page 67.)

CERTAIN POINTS IN THE TREATMENT OF SCARLATINA.

Dr. Buttles related a case where the bisulphite of soda was used as a prophylactic in scarlatina, and which, in the main, corroborated the testimony given in its favor by Dr. M. L. Smith.

Dr. Newman, however, regarded its effects as more than uncertain.

Dr. Buttles urged early and continued greasing during the progress of the disease, as a very essential element in its treatment. This method is reputed to be much relied on by German practitioners.

Dr. T. Nichols regarded the use of Dover's powder as admissible when great jactitation or troublesome delirium was present, the only contra-indication being active congestion of the brain.

Dr. Thoms, while he questioned its prophylactic properties, was disposed to pronounce belladonna,

which according to some exerted its power upon the pneumogastric nerve, a very valuable anodyne, and one not to be ruthlessly discarded simply because it had once been much lauded by "irregulars." The fact of its having been overrated should not prejudice us against its more humble claims.

Dr. M. L. Smith then gave the history of two cases of extensive abscess on the anterior and lateral surfaces of the neck, after scarlatina.

The meeting then adjourned.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Conversational Meeting, March 13, 1867.

Dr. Andrew Nebinger, President, in the Chair.

(Specially Reported for the Medical Record.)

THE STATUS OF FEMALE PRACTITIONERS OF MEDICINE.

The report of the Committee, to whom had been referred the subject of a resolution laid over from the last meeting of the Medical Society of the State of Pennsylvania, held at Wilkesbarre, Pa., in June last, to the effect that nothing in the resolution of 1860, declaring it unprofessional for members to consult with the professors or graduates of Female Medical Colleges, as at present (1860) organized, should be so construed as to prevent members from consulting with properly qualified female practitioners, who strictly observed the code of ethics, was read by the chairman, Dr. D. Francis Condie, and is as follows:—

"*To the Philadelphia County Medical Society.*—The subject submitted for the consideration of your Committee may be comprised in the following question, namely:—Is the recognition of female medical graduates, by our profession, proper and expedient?

"It cannot be denied that there are in our midst women of fine natural abilities, cultivated by a thorough liberal education; nor will it be doubted by any one that, were one of this class of women to be thoroughly instructed in the institutes and practice of medicine, she would be as likely to become as successful a practitioner of the healing art as any male graduate; and were a woman thus qualified to confine herself to the investigation and treatment, especially, of the diseases of her own sex, and of children, we do not believe that the association with her at the bed-side of the sick would be objected to by any liberal-minded practitioner of the other sex. But to inundate our profession with a host of females possessed of no higher qualifications, professional or ethical, than are possessed by the graduates of badly organized and irresponsible schools, cannot be too strongly deprecated. There are just grounds to believe that such will most surely be the case as schools for the manufacture of female doctors multiply, and their benches become thronged by women who are prompted to the pursuit of medicine by no higher motive than what results from a feeling that it is one more respectable, less confining, and more remunerative than any of the ordinary pursuits that are now open to them.

"Even to those ladies who are conscious of possessing all the qualifications, intellectual and educational, to enable them to enter, with a fair prospect of success, upon the study and practice of the healing art, we would say, "Pause before you assume the toil and anxious cares, the heavy responsibilities, incident to the life of a physician. Recollect, also, that in devoting your days to the practice of medicine, you must necessarily forego that high and noble mission, for the fulfilment of which you were destined by your Maker. You cannot hope to become the central sun of the domestic circle, diffusing throughout it a genial light, and warmth, and beauty; you must give up the pleasing task of developing—as none but a mother can—the physical, moral, and intellectual faculties of the young; and of acting out your appropriate rôle of becoming at all times, and in all things, a help meet for man. To practise medicine faithfully and successfully, demands a concentration upon the work of the whole mind—of the entire life. It will allow of no other pursuit being carried on in connexion with it; scarcely of any turning aside for necessary relaxation and repose.

"There is another important preliminary to be disposed of by the female before it will be prudent for her to assume, as the pursuit of her future life, the arduous, never-ending task, the anxious, exacting duties of a medical practitioner; and that is, to determine whether her physical strength, and the physiological peculiarities of her organization, are such as will enable her to fulfil, faithfully, the duties of a medical practitioner, without incurring the risk of an early loss of health, leading, it may be, to an early extinction of life.

"In disposing of the question submitted for the consideration of your Committee, the fact must be taken into consideration, that female practitioners, authorized by the authority of the State, already exist, with a clear prospect that their increase in the future will be far greater than it has been in the past. In view of this fact, your Committee would respectfully suggest whether the wisest course for us to pursue would not be to offer every encouragement and facility to insure to the female graduate such educational and professional acquisitions as will enable her to enter with safety and with credit upon the practice of medicine.

"We confess that we are opposed to female medical colleges as now organized. If we are to have female physicians, let them emanate from the same schools at which our male physicians receive their professional education. Our leading medical colleges are constantly embracing in their faculties the best talents of the country, enlarging their courses of instruction, and elevating their requisites for graduation. Let these advantages be extended freely to female students. If objection is made to females being taught in the same classes with the male students, they may be formed into separate classes, and receive instruction at hours appropriated especially to them.

"Your Committee trust that the medical profession will never approve of a recognition of every female graduate, without discrimination, as a legitimate member. Your Committee believe, nevertheless, that it would be a judicious measure—one indeed of policy and of justice—to draw a broad line of demarcation between the worthy and the unworthy, the competent and the incompetent of these females who come forward as practitioners of medicine, and, while without hesitation the unworthy and the incompetent are repudiated, the hand of fellowship be extended to the opposite class, in all good faith; confirming them thus in an honorable career, and at the same time granting to them the same rights and privileges that are secured by our code of ethics, to every member of the profession, and subjecting them to the same penalties for any infringement by them of the provisions of that code.

"When we shall be prepared to draw such a line of demarcation, and by what authority it shall be established, are questions which cannot be definitively settled until all necessary regulations in respect to the education of female aspirants to the doctorate in medicine shall be established, and the nature of the security that shall be required of them for a strict compliance on their part with such regulations, shall be settled.

"Having thus presented very candidly their opinion on the subject submitted for their consideration, your Committee would present for your adoption the following resolution, namely:

"*Resolved*, That the Philadelphia County Medical Society cannot consent to the repeal of the resolution passed by the Medical Society of the State of Pennsylvania, at its session of 1860, in reference to 'the graduates of Female Medical Colleges, *as at present constituted;*' and they hereby instruct the delegates from the Society to the next session of the State Society, to use all honorable means to prevent the repeal of the said resolution, which they believe to be as loudly called for now as at the period when it was passed.

"All of which is most respectfully submitted by

"D. FRANCIS CONDIE,
"JOHN F. LAMB.
"A majority of the Committee.

"PHILADELPHIA, March 18, 1867."

A very animated and prolonged discussion ensued when the resolution appended to the above report came up for consideration. The report itself gave apparent general satisfaction. Every speaker who referred to it commended it, and not a single voice was raised deprecatory to it. The speakers seemed divided into three classes: those totally opposed to female medical practitioners, under any circumstances; those willing to extend to them the hand of fellowship at once; and those who were undecided in regard to the subject, and, although disapproving of female practitioners in the abstract, were willing to admit the expediency of receiving them, either at once, or at no distant period, when some standard of professional requirements should be adopted. Then came up the question as to the nature of the standard to be required. Some said, let us receive graduates of schools which may be hereafter recognised by the American Medical Association. To this, answer was made that there is but little chance for a fair hearing on the part of the female practitioner, for neither she nor those associated with her could be received as a delegate; besides which, the code of ethics, in prescribing the requisites for consultation, implied that the status of a physician should be determined in the community where he resided, rather than by the American Medical Association. It was also urged that the resolution opposed the liberal spirit of the report. It was also urged in opposition to the adoption of the resolution appended to the report, that to a certain extent the disability existing in 1860 did not exist in 1867, it being represented that the professors of one female medical college in the country, at least, were regular graduates, and otherwise than in their connexion with the college, in good standing; and that the requisites for graduation by that institution were as stringent in every respect as at the leading medical schools in the country. That therefore, in fact, this college was now differently organized from what it had been in 1860, and that, therefore, literally, that school was no longer subject to the discipline of the resolution. It was also urged in the same connexion, that *necessity*, and not choice, had compelled the female colleges to put up with the best instructors they could obtain; for again and again had female students knocked for admission at the doors of our regular medical institutions, and as regularly had they been refused. That they were anxious to become thoroughly instructed, and it was their misfortune and not their fault that they received instruction of inferior quality.

It was proposed to substitute for the resolution of the Committee, one approving of the adoption of the resolution offered by Dr. Mowry at the State Society, permitting consultation with properly qualified female practitioners who observed the code of ethics; but it was at once met by the objection of an unwillingness to permit any man to judge for himself as to who was or who was not properly qualified; and that the standard of such qualification must be decided by a competent medical body, and not by the individual.

At length, after much discussion pro and con., the following resolution was offered:

"Nevertheless, nothing in the foregoing resolution shall be construed to forbid any member of this Society from consulting with any female practitioner, who shall be declared by the American Medical Association as regularly educated, and who gives sufficient evidence of strict adherence on her part, to the code of medical ethics."

SPECIAL CONVERSATIONAL MEETING, MARCH 20, 1867.

THE DISCUSSION ON THE STATUS OF FEMALE PRACTITIONERS OF MEDICINE was continued. A preamble and resolutions were offered as a substitute for the resolution under consideration, the principal feature of which was, that the Female Medical College mentioned upon the previous occasion, being at present a regularly organized institution, requiring the same qualifications for graduation as the regular medical colleges, their professors and graduates should be entitled to recognition in consultation. Under the impression that all the professors of this institution were in good standing, and observed the code of ethics, it is likely that the preamble and resolutions referred to, and of which it is unnecessary to be more explicit in this report, would have been passed after undergoing some modifications. But the exhibition by one of the members of a printed circular of one of the professors of this Female Medical College, calling the attention of the public to the superior and infallible superiorities of certain cholera remedies, and other secret remedies, prepared solely by himself, and calling attention to the fact that he was prepared, at certain office hours, to be consulted, in certain languages, upon any diseases incident to either sex, etc., completely nullified the effect produced by the preamble, and the discussion which had thus far followed it, and the resolutions were lost without a dissenting voice.

Then the following preamble and resolutions were offered by DR. BELL, and adopted unanimously:—

WHEREAS, in looking to the usefulness and dignity of the profession which are inseparably connected with the welfare of the community, we are met with very grave objections to women taking on themselves the heavy duties and responsibilities of the practice of medicine. Their success in the walks of general literature, and even, in some instances, of science, which allow them a choice of time and season for intellectual labor, cannot be adduced as argument in favor of their ability to bear up under the bodily and mental strain to which they would be unceasingly subjected in this new vocation. The physiological peculiarities of a woman, even in single life, and the disorders consequent upon them, cannot fail frequently to interfere with the regular discharge of her duties as physician in constant attendance on the sick. How much greater must be the interruption to her duties if she enters the married state, and becomes a mother and nurse. Her delicate organization, and predominance of the nervous system, render her peculiarly susceptible to suffer, if not to sink under the fatigue and the moral shocks which she must encounter in her professional rounds. Man, with his robust frame, and habitual self-command, is often barely

equal to the task. The home influence of women is one of the greatest benefits growing out of Christian civilization. More especially is this manifest when we look at her as head of the household, a helpmate to her husband, and the confidant, guide, instructor, and loving friend of her children, whose future happiness and respectability so much depend on her tuition and example. What would be the state of the household, what the present condition and future prospects of the children, deprived to a considerable extent of their natural guardian, who would be engaged all day, and not secure against calls in the night, in the service of the sick? Nor when at home, can the mother, worried, and fretted, and anxious about her patients, be in a fit frame of mind to interchange endearments with her beloved little ones, to receive their confidence and offer advice.

Once embarked in the practice of medicine, a female physician will not long confine herself to attendance on persons of her own sex; and it is easy to conceive the embarassments on both sides, which would be met with in her visiting and prescribing for persons of the opposite sex. If her services be restricted to the female portion of a family, there must be a male physician to attend on the males; and thus there will be constantly two physicians in the regular service of a family, with all the chances of counter-prescription and advice, and breach of ethics, misunderstanding, and heart-burnings. With this new element of probable discord, it will be doubly difficult for us to conform to the code of medical ethics. If a female physician be once received in full standing and professional intercourse, by consultation, or otherwise, with a physician of our own sex, the greatest latitude will be allowable in the statement of the case, its symptoms and causes, and question of treatment, therapeutical and psychical. Will woman gain by forgetting to blush, and by discussing every topic as it comes up with philosophic coolness? or man be improved in the delicate reserve with which he is accustomed to address women, both in the sick-room and elsewhere? The limits of modesty once passed in this professional intercourse, is there no danger of further advances, in which a sensitive nature would repel as familiarities, what under other circumstances would be inadmissible?

Could women be induced to see the true line of duty in relation to medical study, it would be to learn preventive medicine, and acquire a suitable knowledge of physiology and hygiene, so as to be able to preserve their own health and that of their children; and to inculcate on the latter the close connexion between the physical and moral well-being of our nature. The field is large, and its cultivation would richly repay the laborers in it.

In no other country than our own is a body of women authorized to engage in general practice. The specialty of midwifery practice in France is hedged in by restrictions which call for the assistance of medical men in every case of difficulty or doubt.

Moved by these considerations, be it therefore

Resolved, That in conformity with what we believe to be due to the profession, the community in general, and the female portion of it in particular, we cannot offer any encouragement to women becoming practitioners of medicine, nor can we consent, on these grounds, to meet in consultation such practitioners.

PROCEEDS OF THE BALL IN AID OF THE NURSERY AND CHILD'S HOSPITAL.—The Treasurer of the Nursery and Child's Hospital has received the sum of $12,383 59, being the net proceeds of the ball given for the benefit of that institution on the 4th of March last.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, MARCH 20, 1867.

DR. A. C. POST, PRESIDENT, in the Chair.

DRS. JAMES ANDERSON and CHARLES A. BUDD presented to the Academy several volumes, confided to them for that purpose.

THE SOURCE OF UREA.

DR. JOHN C. DRAPER called the attention of the Fellows to the corroboration of views regarding the source of Urea which had been advocated by him in a thesis some ten years ago. The opinion then expressed resulted from a series of experiments, which had covered a previous period of two years. About this time he had also published in the old *Journal of Medicine* a paper, in which he maintained that the "Urea merely represented the access of nitrogenized material consumed, and was not indicative of the amount of muscular action." In 1860, May 20, he read before this body another paper, in which it was shown that the effete materials arising during muscular action are evacuated as insensible perspiration, by skin and lungs, and that the loss by these channels is much greater than by the kidneys. He was thus explicit in his statements, because the doctrines then enunciated, and which had now begun to excite attention in Europe, were in reality directed against Lehman's theory that urea was the product of muscular disintegration. Drs. *Nick* and *Wislicenius* now also assert that muscular force is the result of oxidation of fats. They regard a bundle of muscular fibres as a species of machine, formed of nitrogenized material, as an engine is made of iron and brass. As coal is the origin of force in the latter, so the combustion of fat is the producer of force in the former; and as in the engine there is a slow, gradual rust and wear taking place, so in the muscular fibre there is also a similar destruction of material which bears an infinitely small ratio to the force produced. The analogy instituted was certainly a beautiful one and exceedingly suggestive.

DR. HUBBARD'S TRUSS.

DR. N. W. HUBBARD, of Illinois, was then introduced, and adjusted his truss upon a patient afflicted with double inguinal hernia. He claimed that his instrument had above all others the advantage of simplicity and perfect adaptability to every variety of condition, stage of development, and complication of hernia. The pad, which was of wood, might be adjusted to any angle, so as to fit the corpulent or spare, while the pressure was capable of a like variation. It also possessed a retentive power, which might be rated as three times greater than the actual pressure.

The Truss will not cramp or move when the patient gets into *any* position, and it is easy and pleasant to wear, as a necessity, resulting from its perfect adaptation.

Owing to the fact that the girdle was made of steel, which was annealed to within a short distance of the pad, the instrument could, with a reasonable amount of strength, be moulded to any shaped pelvis. The periphery of the pad, also, as in the case of femoral hernia in the female, might be pared down to meet the emergencies of the case. In fact, any necessary or desirable alteration in size or shape of truss, position of pad, or pressure, can be made at pleasure, so that the patient will feel that no further improvement is requisite, or can be made.

DR. HAMILTON said that no new principles had been involved in the construction of the truss exhibited. The

pad was of the old Chase pattern, and the tractable girdle had likewise been previously used. But he, for one, had always avoided the encouraging of patented instruments, and to this objection the present truss was open.

Dr. Joel Foster professed to have made himself familiar with almost every variety of truss, and had seen the success of Dr. Hubbard's instrument in one or two cases. He had been favorably impressed with its peculiarities, and had therefore invited the gentleman to exhibit it before the Academy.

Dr. Hamilton had intended no personal discourtesy; he merely battled for the principle, and claimed to represent his profession. He thought that all medical bodies should be very chary of their endorsements of any article, on account of their liability to take the form of advertisements. He thought that all were apt to be misled by the expertness of instrument-inventors, and in this way were led to endow the instrument with superior qualities. It was thus that the general practitioner so often failed in the application of these appliances. In short, it was not the perfection of the instrument, but the skill of "*the expert*," in adjustment, which wrought the wonder.

THE STATE MEDICAL SOCIETY.—CRIMINAL ABORTION.

Dr. James Anderson, as one of the delegates to the Medical Society of the State of New York, reported that the session had been marked by the best of feeling. The meeting, he stated, was large, and according to the impressions of numerous delegates, more interesting than any previously held. As an episode in the transactions, he would mention the fact, that a prominent senator had suggested to him an official recommendation on the part of the Society to the State Legislature, that the circulation of infamous circulars in the community be suppressed by law. He (the senator) was satisfied, upon his own convictions, that these exerted the most deleterious influence. The doctor was himself pained at the enormous extent to which criminal abortion prevailed, and hoped that the profession might be purged of those members, who, tested by the association of names with the practice, had forfeited their position in a most honorable calling. He feared, too, that notwithstanding the incompleteness of testimony, there was no absence of guilt; and that the expression of the disappointed applicant, "If you will not, so-and-so will," was founded on something more than pure fiction. This was the class, he apprehended, that would bear watching.

The Academy then adjourned.

Correspondence.

THE LATE DR. T. K. CHANDLER.

To the Editor of the Medical Record.

Sir—I find in the number of your journal for March 1st a notice of the death of Dr. Thomas K. Chandler, Act. Passed Asst. Surg. U. S. Navy.

Dr. Chandler was a few years ago so well and favorably known, by many of the profession, in your city, that some more marked notice of his death than a mere news item, seems but due to his memory.

He came to New York from Fredonia, Chautauque co., some time in 1860, and matriculated at the College of Physicians and Surgeons.

An illustration of the determination to overcome all obstacles, which was characteristic of the man, will be found in the fact that while attending the lectures he was suffering so severely from necrosis of the femur as to be obliged to use two crutches constantly. I mention this, too, because it will recall him at once to every member of the classes of '60, '61, '62. On graduating in 1862 Dr. Chandler became an interne of Bellevue Hospital, and on the expiration of his term of service, April, 1863, entered the volunteer navy.

He was almost immediately ordered to the Steamer Princess Royal, and served on her in the Mississippi and Gulf Squadrons until the close of the war. He was afterward assigned to duty at the Washington Naval Hospital, and finally was ordered to the Penobscot, on which vessel he laid down his life in performance of his professional duties. During his residence in Bellevue, his professional enthusiasm, his genial disposition, and, more than all, his irresistible humor, won from each one of us, his associates on the resident staff, a most hearty recognition of his worth; and now that he is gone from us, no one of us but will remember him with pleasure and regret his early death.

I am, sir, yours truly,

W. C. Pryer, M. D

New Rochelle, March 5, 1867.

MEDICAL ADVERTISING.

To the Editor of the Medical Record.

Sir—In the Medical Record of March 15, appeared an editorial headed "Medical Advertising again," referring to the use made of my name in a popular newspaper.

I had considered it unnecessary to notice the article as it appeared in the newspaper, well knowing that my associates and scientific friends were fully aware that this "quasi advertisement" was not sanctioned by me; and that even a disavowal under my name would subject me to further suspicion of advertising. But seeing your notice of it, placing me in such an unenviable and unfair position, I gladly accept your invitation to disavow any such use of my name as was there made.

My whole duty in this matter is to give you the facts and assure you that, if the article in the *Eagle* has pained you as a medical journalist, this use of my name has been much more painful and distressing to me.

A report of the case which I had presented to one of our medical societies, served for the "extract from her physician's diary." As for adding the "endorsement of" my "medical name and reputation," this I have scrupulously withheld, as is well known by the medical gentlemen who have seen the case with me.

You must be aware how difficult it is to keep a case so unusual out of the hands of reporters, and you must also appreciate the unpleasant and trying position of the physician in charge. I have been accused of believing in spiritualism and clairvoyance, of being myself a humbug and humbugged. I have been pursued by reporters, strangers, and physicians (male and female), for the particulars of this case, for months. But in every way have endeavored to keep it as professional as possible; and now that the case has so many times been made public, should not be held responsible for anything but my own acts. I appreciate the sympathy expressed in your criticism, and can only say that, in the discharge of my duty, when the proper time comes, I shall be glad to report the case to the profession generally as I have already done partially.

Should you be disposed to set me right before the readers of The Record by publishing this note, or any portion of it, you are quite at liberty to give my name. But in order to avoid even the appearance of further advertising myself in connexion with the matter, my own preference would be to omit the name as you did.

Very truly, * * *

Medical News and Items.

PERSONAL.

Brevet Lieutenant-Colonel W. R. Dewitt, Jr., Surgeon in Chief of the Freedmen's Bureau for the District of Maryland, has been relieved from duty at headquarters in Baltimore and ordered to report to the Assistant Commissioner at Louisville, Ky., for assignment to duty.

Surgeon George Peck has been ordered to report for duty April 1, at the Navy Yard, N. Y., vice Surgeon C. Eversfield to be detached.

Surgeons L. R. Hunter and J. M. Greene have been ordered to duty as examining surgeons to the medical board at the Philadelphia Navy Yard.

Passed Assistant Surgeon John H. Murphy has been detached from the Lancaster and placed on waiting orders.

Passed Assistant Surgeon J. Buckley has been ordered from the Lancaster to the Constellation.

Surgeon Elisha Griswold, United States Volunteers, mustered out of service, to date March 18, 1867.

Augustus T. Peck, M.D., has been appointed an Assistant Surgeon U. S. N. Commission to date from February 25, ult.

Dr. Russell B. Brownell of Sharon, Conn., died of phthisis on the 27th of January, at a place about twenty miles above Edfou, on the river Nile in Upper Egypt.

Dr. John Galvan, an Alumnus of the College of Physicians and Surgeons, N. Y., class of 1855, died in this city of acute phthisis, March 28, in the 33d year of his age.

Delegates Elect to the American Medical Association.—*From the Medical Society of the County of New York.*—Drs. Lewis A. Sayre (*Chairman*), Joel Foster, William N. Blakeman, Thomas C. Finnell, Samuel T. Hubbard, James Kennedy, H. Mortimer Brush, John P. Garrish, Thomas S. Bahan, Edward Bradley, James J. Connolly, Henry S. Downs, Louis Elsberg, Horace P. Farnham, Edward Fowler, N. Marsten Freeman, Abbott Hodgman, E. Lee Jones, B. M. Keeney, Wm. B. Lewis, William M. McLaury, Robert Newman, Wm. C. Roberts, Stephen Rogers, Anthony Ruppaner, Edward H. M. Sell, Gustavus S. Winston.

From the N. Y. Academy of Medicine.—Drs. James Anderson (*Chairman*), Jas. L. Banks, Edwd. L. Beadle, Mark Blumenthal, Henry D. Bulkley, Fred A. Burrall, John Byrne, John C. Draper, Wm. H. Draper, DeWitt C. Enos, Joel Foster, Elisha Harris, Max Herzog, J. Foster Jenkins, E. S. F. Arnold, Joseph Kammerer, Ernst Krackowizer, John Ordronaux, Samuel S. Purple, Benjamin I. Raphael, Gouverneur M. Smith, S. Fleet Spier, Edward R. Squibb, Alfred Underhill, Moses D. Van Pelt, Lothar A. V. ss, and Henry W. B. Woodhull.

From the East River Medical Association.—Drs. Verranus Morse, John Hart, John Shrady, and Montross L. Smith.

From the N. Y. Medical Union.—Drs. E. Lee Jones and Stephen Rogers.

The Rinderpest in France and Belgium.—The Department of State has received a despatch from the United States Legation at the Hague, dated March 16, in which the writer says: "Since my last letter the rinderpest has spread into Belgium and France. The report of its progress in Holland from the 5th of January to the 17th of February, shows a decline from week to week. The number of cases during that period was nearly 18,000; deaths, 7,175; slaughtered, 4,441; being a total loss of 11,596."

Army Medical Museum.—The Acting Quartermaster-General, D. H. Rucker, has issued an order authorizing officers of the Quartermaster's Department, in charge of the Government trains returning from the frontier and other remote points, upon the requisition of medical officers, to furnish transportation by such trains for collections of specimens for the Army Medical Museum, when such transportation can be furnished without injury to the public service.

Sudden Death in a Dentist's Office.—In a recent number of the *Medical and Surgical Reporter* an account of the following curious case is given:— Edmund Kerosin, a young man about twenty-three years old, entered the office of Dr. Ralph Lee, a dentist of this city, to have a tooth extracted. Anæsthesia was produced by nitrous oxyd gas, a cork having been placed between the teeth to keep the mouth open. As the tooth was extracted, we understand, it slipped from the forceps, and with the cork was drawn into the mouth. The tooth was subsequently thrown up from the stomach, but the cork—which does not seem to have been missed—entered the larynx, and by its presence there caused suffocation and death in an hour. A post-mortem revealed the presence of the cork in the larynx and the cause of death. This case, and its lamentable result, should serve as a caution to those who employ such adjuncts in the dental laboratory; and the physician who may be suddenly summoned to patients in a dentist's office, should bear in mind the possibility of an accident like this, and be prepared to open the larynx, if need be, which in this instance would in all probability have given instant relief, and saved the life of the young man.—*Medical and Surgical Reporter, February* 2.

Hudson River State Lunatic Asylum.—The Board of Managers of the Hudson River State Lunatic Asylum met at the Morgan House, Poughkeepsie, N. Y., and elected Mr. Abiah W. Palmer, of Amenia, Dutchess county, President; and Dr. J. M. Cleaveland, Medical Superintendent. Preliminary arrangements were also made to receive plans and specifications for the erection of the edifice.

Dr. David Livingston, the celebrated African explorer, it is now definitely ascertained was murdered by a roving tribe of Africans, about the 25th of October last. He was last heard of at "N'Doude," at the confluence of the Novuma and Niende. The Hon. Edward D. Ropes, United States Consul, writes from the island of Zanzibar, under date Dec. 9, 1866, as follows: "We have information that he proceeded further west to Mataka, a Miao chief, who gave presents of cattle and food. At this point the Indian sepoys remained behind and have since returned to Zanzibar. From Mataka to a lake was eight days' march. On crossing a wide water in Canves, they followed the border of the lake for several days, and thus struck inland. They were suddenly attacked in a bush country, about nine A.M., by a band of Mavite. Dr. L. killed the most forward of the attacking party, but was surrounded and cut down by one blow of a battle-axe, which cut half through his neck. Beyond this we have no details, for those who returned were the first to flee. Almost all who stood near Dr. L. were killed, although they seem to have done considerable with their rifles."

Original Communications.

FIVE UNPUBLISHED CASES OF LIGATURE OF THE SUBCLAVIAN ARTERY, FOR AXILLARY AND SUBCLAVIAN ANEURISM,

By WILLARD PARKER, M.D.,

PROF. PRINCIPLES AND PRACTICE OF SURGERY, COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

Case 1.—A. R., æt. 31, a man of good constitution, fell down a passage-way on the 5th of February, 1849, and a wooden pencil, which was in the side-pocket of his coat, was forced up into the right axilla, producing a wound of the axillary artery. In a few days swelling appeared in the situation of the wound, accompanied with pulsation. On the 18th, some hæmorrhage occurred through the wound in the axilla. It was proposed by the physicians in charge to effect a cure by pressure, but hæmorrhage repeatedly recurring, that plan was abandoned, and on the morning of the 23d I was sent for to ligate the subclavian artery. I performed the operation in the usual way, and placed a ligature upon the artery in its third stage.

On the 4th of March there was a return of hæmorrhage from the wound in the axilla. No pulse at wrist.

On the 6th, there was a recurrence of hæmorrhage ad ℥ xx; on the 8th, there was oozing throughout the morning and a pretty free hæmorrhage at one o'clock. Shoulder livid, hand and arm cold but not numb, tongue moist, no appetite. On the 9th, I cut down upon and freely laid open the aneurism. The wound in the artery being searched for and found, two ligatures were placed, one on either side of it. The ligatures came away on the 18th day, everything progressed well, and the patient finally recovered with the loss of the hand.

Case 2.—J. F., æt. 32, was admitted into the New York Hospital, December 5, 1859. He stated that nine weeks ago at sea, in attempting to step upon a water-cask, he missed his footing and fell a distance of four feet to the deck, striking on his right shoulder. He thought that he had simply received a sprain, but the next day the arm began to swell, was painful and ecchymosed. There was a throbbing in the axilla and pain extended down into the hand. In the course of the week a tumor made its appearance in the axilla, which slowly increased in size. Four days previous to admission, in lifting a bucket of water, he felt something give way in the tumor, the effort being followed by increased throbbing and pain down the arm.

The patient looks anæmic, but his general health is tolerably good. The right arm hangs powerless by the side. The hand and arm are of lower temperature than natural. The shoulder is somewhat elevated, and in the axilla is discovered an ill-defined, pulsating tumor. Pressure made upon the subclavian artery stops all pulsation and bruit in the tumor.

December 13.—I tied the subclavian artery in its third division, in the usual manner.

December 14.—Patient slept well during the night. This morning there is some heat of skin; pulse 96°, feeble.

December 15.—This morning he had a severe rigor, followed by fever and profuse sweating; pulse 100; more feeble. Complains of nausea; tongue coated. This afternoon he had another chill, followed by fever and sweating.

December 16.—Did not sleep last night; complains of pain in head and shoulder; surface warm, pulse 96; very weak. This morning he had a slight chill. Four o'clock p.m., he had a severe rigor, followed by fever, sweating, and delirium. During the evening and night he sank, and on the morning of the 17th he died.

At the autopsy, the rupture of the artery was discovered just beyond where the vessel emerges from between the two trunks of the median nerve. Some clotted blood was found in the tumor, but it was mainly fluid. The lungs, liver, and intestines healthy. Heart fatty, soft, dilated and flabby. No clots in any of its cavities. No clot in any of the large vessels. Kidneys fatty. There is no record of the urine having been examined.

Case 3.—J. D. æt. 39, seaman, was admitted into the New York Hospital, October 30, 1860, and gave the following history: Six years ago, while in China, he contracted syphilis, and was treated by mercury. During treatment he took cold, and lost the use of his limbs, and it was three months before he recovered from the paralysis. He is now suffering from secondary symptoms, and in addition suffers from an axillary aneurism of the right side. The tumor is situated under the clavicle and pectoral muscle; it is compressible; pulsation is very distinct; and the aneurismal bruit is clearly heard. Since admission to the Hospital the aneurism has been increasing in size. November 13, at a consultation, it was determined to tie the subclavian in the third stage. The artery was reached without difficulty and a ligature was placed upon it. When the ligature was tightened, the aneurismal thrill and bruit entirely ceased, and in the course of a quarter of an hour the size of the tumor had considerably diminished.

Nothing occurred in the after treatment worthy of especial notice. The ligature came away on the sixteenth day. The tumor diminished considerably, and became firm to the touch. Numbness and loss of strength continued more or less until May 15, 1861, when the patient was discharged cured.

Case 4.—Mr. D., æt. 37, a farmer from Conn., of healthy and temperate habits, stated that four years ago, after recovery from an attack of pneumonia, he discovered a small tumor just below the left clavicle. This tumor gradually grew larger, and he observed that it pulsated, and he could hear a noise in it. Six months ago it began to be painful. He spoke of going to the war, and consulted his physician, by whom he was informed of the seriousness of his disease, and recommended to live a life of quietness, and to avoid all exertion. On the 17th of September, 1861, he shouldered a sack of corn to take it to the mill, and immediately felt that he had hurt himself in the tumor. From this time it has increased rapidly, and become very painful; pains also traverse the arm and hand. Dr. Bostwick now wrote to me, and I visited the patient at his home on the 1st of October.

On examination, I found a pulsating tumor which filled the axilla, and extended under the whole scapula behind, and under the pectoral muscles in front. The scapula was raised, as was also the clavicle. The measurement on the left side, from the centre of the clavicle to the spine of the scapula, was twenty inches. That on the right side, from the same points, was twelve and a half inches.

Oct. 2.—Everything being in readiness, the patient was etherized, and I tied the subclavian artery in its third division. Some little difficulty was experienced in the operation from displacement of the parts, and the artery was found to be very deep. The vein was pushed upwards from under the clavicle.

Nov. 16.—I received a letter from Dr. B., in which he stated that the patient was "up and about." He

omitted to state, however, the period of separation of the ligature.

April 14, 1862.—Mr. D. called upon me, and reported himself in excellent health. The tumor has diminished in size one-half, and is no longer a source of annoyance.

CASE 5.—In which the subclavian was tied in its first portion, together with the common carotid and vertebral arteries. (This case is partially reported in the Transactions of the Pathological Society, in the *American Medical Times*, March 5, 1864.)

H. D., æt. 32, carpenter, had enjoyed good health until August, 1862. At that time he noticed a tumor as large as a walnut, immediately above the centre of the right clavicle. This, he said, came on without any injury or blow that he could remember. It remained of the same size for nine months; but for the last three months it has been gradually enlarging.

I saw the patient in August, 1863, and the diagnosis of aneurism was at once made. The tumor was considerably larger than a walnut, and by pressure upon the axillary plexus was causing much pain and numbness in the hand and arm. For the present, he was advised to return to his home in the country, to take no violent exercise, and to live upon a vegetable diet.

On the 2d of September he returned to the city, and was admitted into the New York Hospital. The tumor now had very much increased in size. It extended from the outer edge of the right sterno-cleido-mastoid backwards for three inches, to the anterior border of the trapezius, and upwards, for about two inches. His nights were sleepless, and there was a very singular change in his circulation. When last seen the pulsations in each wrist were regular, and numbered 76; now the pulsations in the right wrist could hardly be appreciated, and on the left side there was nearly the same condition of things present. The pulsation of the carotid varied from 120 to 130.

A consultation, which was called, resulted in a decision to tie the common carotid near the bifurcation, and secure a good plug, and also the subclavian inside of the scalenus, together with the vertebral artery. It was thought best to tie the vertebral, in order to guard against the accident which occurred in Dr. Rodgers's case of ligature of the left subclavian in 1845.

Operation.—An incision was made from the centre of the interclavicular ligament upwards for two and a half inches. A second, beginning at the same point, and following the upper margin of the clavicle, was extended outwards a distance of four inches. The integument, fasciæ, and platysma were then raised and turned aside. The sterno-mastoid, sterno-hyoid, and sterno-thyroid were then divided as near as possible to the clavicle, and dissected up. The carotid was now seen, somewhat enlarged, and a ligature passed around it without tying, while search was made for the subclavian. After careful dissection a ligature was passed around the subclavian close to the innominata. The carotid was then tied one half inch above its origin. Search was now made for the vertebral, which was found somewhat deeply situated, and it was tied a quarter of an inch from its origin. The subclavian was then tied close to the innominata. The vessels all appeared to be healthy; the wound was closed, and cold water dressing applied. The case progressed exceedingly well until the tenth day, when there was a slight hæmorrhage, which, however, was easily controlled.

On the twelfth day the ligature from the vertebral artery came away.

On the fifteenth day the ligature of the carotid came away. This was followed by a slight hæmorrhage, which, however, had nothing to do with the artery itself.

The ligature of the subclavian came away on the twenty-fourth day.

On the 29th of September there was a slight and easily controlled hæmorrhage.

Oct. 1.—Suppuration from the wound was very free, although nature has done a great deal towards closing the wound, the tissues having gradually broken away under the influence of pressure, and the persulphate of iron which has been used to check the bleeding.

Oct. 7.—Hæmorrhage to the extent of three ounces, and pretty free. In the evening, again, hæmorrhage one ounce. He rallied, however, from all this until the forty-second day after the operation, when hæmorrhage again occurred, and he died.

The autopsy, which was made by Dr. Sands, will be found fully reported in the number of the *American Medical Times* previously referred to. It may be well enough to state, however, that the innominata was found completely filled with a firm coagulum. There was also a plug in the distal end of the carotid, and in the distal end of the vertebral. The distal end of the subclavian did not contain any clot, and water injected into the aorta made its escape from the wound through the open mouth of this artery.

NEW YORK, 37 East 12th Street.

THE MEDICAL USE OF ELECTRICITY.

BY G. M. BEARD, M.D., AND A. D. ROCKWELL, M.D., OF NEW YORK.

No. III.

IN the case of a woman afflicted with syphilitic rheumatism and neuralgic pains of the left shoulder, we were able at first to give only a very temporary relief. The first six applications enabled her to raise her hand to the top and back of the head, which she had not been able to do for a number of months; but she soon relapsed, and was as bad as ever. She seemed inclined to persevere, and we continued to give her applications of the faradaic current, descending and ascending, alternately, over the affected shoulder.

Occasionally, also, we operated over the vital organs. After a protracted treatment of over two months, we succeeded in greatly relieving her neuralgic symptoms. She did not recover the full use of her arm, although she could easily raise it to the top and back of the head. Her appetite, which had been poor, decidedly improved.

Case Fifth.—Mrs. R., of Rochester, a married lady, æt. 38, came to us in August, 1866, complaining of severe and protracted paroxysms of pain in the fourth toe of both feet, that had distressed her for eleven years. Her story was a singular one, but in its essential particulars was typical of some of the cases that we are called upon to treat. She represented that for a long time hardly any week had passed in which she had not suffered pain, that often extended up the leg to the hip; and that her mental emotions—anxiety, terror, depression—at once telegraphed themselves to the diseased nerve and excited pain. Her general health was only fair, and her temperament was decidedly nervous. Sitting too long in over-heated rooms or in crowded assemblies—fatigue, produced by any cause, even the annoyance of listening to a dull sermon, or a sight of a strange clergyman in the pulpit, would make themselves felt in the offending members, and give rise to intense agony. There were no evidences of inflammation of the tissues of either toe, other than soreness of the first joint. Eight general applications of the descending faradaic current were given, but the patient apparently received no benefit.

Her pains still continued at intervals; nor was her general condition improved as much as usual in such cases. Moreover, slight œdematous symptoms appeared. She left us, and as we supposed, entirely discouraged.

Four weeks ago, she came into our office, looking fresh and healthful. She said that for three months after leaving us she had experienced no pain; that her general health also steadily improved; but that a slight attack, a few days previous, brought on by a cold, had warned her of the liability of a recurrence of her old paroxysms, and for that reason she desired an application.

There can be little doubt that she is destined to suffer other attacks at times; for if the theory that such painful symptoms are caused by inflammations within the sheath of the nerve be true, then a paroxysm may be brought on at any time by long-continued exposure to cold.

Anæmia, Dyspepsia, and General Debility.—Our attention was first called to the utility of electricity in dyspepsia, by patients who were treated for other diseases, with which indigestion, in its various phases, was complicated.

Those upon whom general applications were made, reported an increase of appetite, relief of constipation, diminution in the frequency of attacks of sick headache.

Case First.—Mr. S., of Connecticut, came to us, complaining of headache, ringing in the head, vertigo, acidity of the stomach, distress after eating—in short, of all the usual symptoms of dyspepsia. His organization was distressingly nervous. All his movements were characterized by an unusual swiftness and haste. In his conversation, business and pleasure, the world and religion, were strangely mingled.

We half suspected incipient insanity. We told him that the treatment would be protracted, and advised him to receive an application once or twice a week, at least. For the first week or two there was no very marked improvement, although he said he always felt very much exhilarated after each application. After four or five sittings, the change for the better was very decided. Not only were his dyspeptic symptoms relieved, but his general nervousness was diminished.

His appetite was less capricious and exacting. Said he, "Before I tried electricity, I had to eat seven meals a day; now I can get along with only three." His brain seemed to progress with his stomach. His conversation was more subdued and logical. When we last saw him, he was a calmer as well as sturdier man, although not wholly free from dyspeptic symptoms.

In his case, there was no increase of muscular development, which is so often observed after repeated general applications.

Case Second.—Mr. T., a bookseller, aged 31, stated that for a number of years he had suffered from chronic dyspepsia, which had rendered his life miserable. He had lost much in flesh. Although 5 ft. 8 in. in height, his weight was but about one hundred pounds. He complained of regurgitations from the stomach of an intensely sour liquid, and on rising in the morning he was often troubled with pyrosis. Tympanitis was a frequent symptom, and oftentimes the accumulation of gas within the stomach embarrassed the respiration, and disturbed the action of the heart. Treatment was commenced about the middle of October, 1866, and continued for four weeks, the faradaic current being applied three times each week. The daily regurgitations, the tympanitis, and pyrosis, gradually ceased to annoy him; and after the tenth application, he informed us that during the month he had increased in weight some fifteen pounds.

About the beginning of January, 1867, he called upon us, stating that his health was excellent, and that his total increase in weight, since he first commenced treatment by electricity, was some thirty pounds. He said that he did not feel that his digestive organs were as strong as they had been, before he was attacked with dyspepsia, but they had ceased to give him any considerable annoyance.

Case Third.—Mrs. H., a widow lady, aged 32, came to us, Dec. 1st, complaining of a stiffness of the left knee, which had annoyed her for more than fifteen months, to such an extent that at times she was absolutely unable to walk. She was also troubled with an unpleasant cough, and some difficulty of the throat. Her bowels were much constipated, her digestion imperfect, and her circulation languid.

She was exceedingly nervous, and at times her sleep was much disturbed. From the fact that other joints were occasionally affected, we were inclined to the opinion that rheumatism was the cause of the swelling and stiffness of the knee.

General tonic applications were recommended, down the spine, over the stomach, liver, and bowels, and especially over the affected joint. Immediate relief was experienced after the first *séance*. She was able to raise her left foot four inches from the floor, and the pain was greatly soothed. The next day she complained of some soreness, which is very often the case after the first general application. The same treatment was continued for one month, the patient visiting us three or four times a week. We examined her throat with the laryngoscope, and found a slight pharyngitis and laryngitis, that readily yielded to topical applications of nitrate of silver. The improvement was more rapid than we had anticipated. Her appetite became exceedingly keen, the bowels regular, her sleep refreshing, and the color returned to her cheeks. Moreover, the cough, which had caused her much unnecessary alarm, nearly disappeared. The patient was so pleased with the invigorating effects of the applications, that she persisted in the treatment for some time after the knee had ceased to trouble her. A short time ago she fell and injured her knee, causing it to exhibit inflammatory symptoms, that readily yielded to a repetition of the same treatment. Her general condition continued to be excellent. It is probable that she will have recurrences of the affection of the joint.

Amenorrhœa.—Electricity has been used for both suppression and retention of the menses, by several continental physicians, and with excellent results. Dr. Garratt treats such cases continually and successfully.

Dr. Fordyce Barker has reported two or three cases of amenorrhœa successfully treated by electricity, in the New York *Medical Journal*.*

Case First.—In the early part of September, 1866, a young lady of eighteen came into our office and inquired what we could do to cure her disease of the heart. Her speech was only in broken utterances, and her breathing was short and rapid. She was decidedly anæmic, and had been troubled with amenorrhœa for two months. The patient was so hysterical that the first application was given with difficulty. Whenever the strength of the current was much increased, faintness was at once produced. After the first week, however, she could bear a current of ordinary strength without discomfort.

The treatment was continued for one month—the patient visiting us every other day. By that time her apparent cardiac symptoms had disappeared; her breathing was more natural; her cheeks full of color, and her

* Vol. I. p. 188.

step more firm. Her menses returned after the eighth application.

Case Second.—Miss D., aged 25, was sent to us by Dr. James L. Brown, to be treated for suppression of the menses, caused by a sea voyage five months previous. She was stout and vigorous, and complained of no other symptom. According to Dr. Brown's diagnosis, there was no organic uterine disease. We gave her a general application with the descending faradaic current. The next day she said that some blood had appeared. The application was repeated, a strong current passing over the bowels and lower portion of the spine. With that utter disregard for the interests of science that is not uncommon with that class of people, she visited us no more. Two weeks afterwards, one of us met her by chance, and ascertained that she had a healthful flow for two or three days after she left our office.

Case Third.—In the case of a Mrs. L., aged 37, also sent to us by Dr. Brown, we were not as successful; but the case is of interest, as exhibiting the tonic effects of general and persistent applications of the induced current.

For eighteen months she had not seen her courses, although she had been skilfully treated for a long time. Her general health was poor, and she was somewhat anæmic. Her appetite was feeble and capricious, and her rest was much disturbed. She was also annoyed with constipation, and with neuralgic pains in the hip. She was so near the change of life, and had given so little evidence of yielding to her previous treatment, that we gave her but slight encouragement. Six or seven applications with the descending faradaic current were given with good results, so far as her general health was concerned; but her menses did not appear. We then applied the positive electrode against the os, and swept the negative over the lower part of the bowels and spine, and vice versâ, until we became convinced that it was useless to continue the treatment any longer. When she left us, her appetite was good, and her bowels regular; she could sleep soundly, and no longer experienced the neuralgic pains—but there were no indications of a return of her courses.

We believe that merely local applications, however varied and persistent they may be, will give very uncertain results in the treatment of amenorrhœa.

Chorea or St. Vitus's Dance.—This strange and frequent malady we find to yield to repeated tonic applications, in nearly every case, although the treatment must often be quite protracted.

Mary S——, aged 14, first exhibited symptoms of chorea in the right side of the face, and in the right arm, April, 1866. She grew worse slowly, until November, when she came to us for treatment. General tonic applications were made about three times a week. Over the cerebellum, the head was far more than ordinarily sensitive to the current. After two weeks we could discern not the slightest improvement, and all parties concerned apprehended a failure. The treatment was continued a month longer, and with most pleasing results. She had good control over every movement, and her general health was excellent. In all cases, we find that the spasms diminish in proportion to the bettering of the general condition.

The above, both in its results and in its difficulties, is typical of a number of cases that have come under our treatment. To what extent relapses will occur, if at all, time alone can determine.

Rheumatism and Paralysis.—The profession are so familiar with the results of electrical treatment in cases of paralytic and rheumatic affections, that it seems almost superfluous to detail our experience with them. We employ the induced current successfully in all the stages of rheumatism. Where there is active inflammation, the cure is usually more sure and more speedy than in passive chronic states. *Under the careful use of the descending faradaic current, angry joints are soothed, burning pains subside, and the fiery skin is reduced in temperature.* Upon these facts of our experience, we lay special emphasis, because to use electricity in active inflammation is contrary to all the teachings of the past. We have met with the same gratifying results in our applications to recent sprains and acute conjunctivitis. It may here be remarked that we often fail in rheumatic cases, unless we employ general as well as local applications. The ordinary method of passing the current through the affected joints only, usually does some good, but rarely works a cure.

Case First.—C. W. R., aged 25, had been afflicted with subacute articular rheumatism for more than three years. At times he would seem to be almost entirely free from his trouble; but about twice a year, a severe attack would come on, lasting generally from two to three months. In the middle of July, 1866, after several months of comparative ease, the rheumatism again showed itself, and this time, with but little delay, he came to us for treatment.

On the 3d of August, when first seen, his right ankle was so swollen and painful that he could with difficulty ascend the stairs to our office. His left shoulder and hip, together with several of the joints of his toes and fingers, were also somewhat enlarged. Applications were given at first every other day, and then every third day for three weeks, at the end of which time the swelling in all the joints was dissipated, and the accompanying pain entirely relieved. According to his statement, the patient had never experienced a more severe attack, and its duration had invariably been from two to three months. In this instance he suffered but for one month from the beginning of the attack, treatment having been commenced after the lapse of about fifteen days. He promised to report, if he should have a return of his difficulty, but up to this time (February, 1867) we have heard nothing from him.

Case Second.—Miss L. was a sufferer from severe pains in the shoulder, wrists, and many of the joints of the fingers. The right wrist was considerably swollen, together with the second joint of the thumb, third joint of the first finger, and the second joint of the second, third, and fourth fingers of the right hand. Of the left hand, the third joint of the first finger and the second joint of the third finger were enlarged. Some of the joints were of great size, and this state of things had persisted with little change, for over one year. Treatment was commenced, and continued for three weeks. On the arms, hands, and fingers, the ascending faradaic current was used exclusively. Thorough applications were, however, made over the digestive organs, particularly the stomach.

After the first application, the patient expressed herself as entirely relieved of the pain in the shoulder. The second sitting served to dissipate the swelling of the wrists, but as yet no decrease was observed in the size of the joints of the fingers. These, however, began to yield after the fourth application, and rapidly decreased in size until a cure was effected.

Time must decide how long cases like these will remain exempt from their rheumatic symptoms after they have been once dissipated by applications of electricity.

914 Broadway.

PROPOSAL OF A NEW METHOD
FOR FACILITATING
THE OPERATION FOR BADLY UNITED FRACTURES.

By FREDERICK D. LENTE, M.D.,
OF COLD SPRING, N. Y.

Called recently to a long distance from this place to visit, in consultation, a case erroneously represented to me to be a badly united fracture of the bones of the leg, of some eight or nine weeks' standing, with a request to "bring ether and chloroform, and all necessary instruments," and thinking over the means at my disposal for effecting an improvement in the anticipated deformity, without resorting to a severe operation, I concluded, in case of the *callus* being firmly consolidated, to adopt Brainard's method (drilling it in various directions through one puncture of the skin, so as to weaken it; then rupturing by forcible extension combined with lateral pressure and counter-pressure*) when the idea occurred to me to try an improvement of this method in the following manner: To use a drill of very small size for perforating the centre of the callus through a mere puncture in the skin; then to follow this with an instrument which I shall call a *subcutaneous saw*. The teeth only extend, from its rounded point, about one inch, the blade being smaller than the drill. By this arrangement the saw may be worked to a limited, though a sufficient extent to cut through *callus* very rapidly, and yet not to touch the soft parts with the teeth; and may be turned to cut, first in one direction, and then in another, without withdrawing from the puncture. Should there be any important vessel or nerve lying in close proximity to the distal side of the *callus*, which the end of the saw, though blunt, might irritate or wound, it would be unnecessary to perforate its whole thickness; nor would it be necessary to saw through its whole substance on either side, as a portion could be, indeed had better be, ruptured by moderate force.

As it turned out, no operation was required in the case above alluded to; but I have thought that some other surgeon might wish to make a practical application of my idea. I happened to have on hand just the instrument which, with a slight alteration, was requisite; one which I had had fashioned, when a medical student, for making curved sections of the temporal bone for exhibiting the different parts of the auditory apparatus therein contained. It is here delineated somewhat reduced in size.

The advantage of this instrument in certain cases of vicious union of fracture will probably at once occur to the mind of any surgeon who has had to deal with such cases. The treatment advised in the standard works on surgery, in a case where the *callus* cannot be ruptured by a safe degree of force, is the very serious procedure of converting it into a severe compound fracture, by dividing the soft parts more or less extensively, and sometimes removing a portion of the bone. In certain cases this treatment, or even the more serious alternative of amputation, will of course now and then be required; but it is to be hoped and expected that the plan here proposed may very materially diminish the number of such cases. This treatment is, however, not only applicable, it is suggested, to cases of *very firmly consolidated* union, but to such as are usually treated by severe pressure and counter-pressure, alone or combined with forcible extension for a period more or less prolonged; since the latter procedure, even in cases admitting of its successful application, is tedious, troublesome, and painful, and not unattended by danger. The existence of a very considerable overlapping of the fragments would not necessarily be a bar to the adoption of this treatment, since I have known a case treated in the New York Hospital by refracture a year after the accident, where the shortening of the femur amounted to more than three inches, and was reduced to less than one inch by the operation.

The instrument will sometimes be found useful in another and entirely different class of cases. Thus, two weeks ago, I was called to a case of compound fracture of both bones of the leg; the sharp, bevelled extremity of the upper fragment of the *tibia* protruding an inch through a small wound. It was reduced with some difficulty; but three days ago it was found again exposed, in consequence of sloughing of a portion of the integument, and evidently doomed to necrosis. I was anxious to be rid of it; but it was much too thick to be cut off bodily with the bone-forceps, and a chain-saw could not be passed around it and worked without disturbing the wound and the fracture very much. So, with the assistance of my partner, Dr. Barker, who elevated the soft parts slightly with a narrow curved retractor, I let the point of the saw pass under them thus guarded, and gently sawed through the hardest part of the bone, while another assistant held its extremity with a pair of suitable forceps, and then completed the section with one clip of the bone-forceps without materially disturbing the limb, which hung suspended in Smith's "anterior splint," and with very trifling pain to the patient.

It is possible, it is further suggested, that the method might be applied to old cases of *ununited* fracture, when it is expedient to freshen the fragments by removing their smooth and rounded extremities. It could be more effectually and rapidly effected in this manner than by the means usually employed, and through a smaller wound of the soft parts. In fact, the opening in the latter, necessary for the working of this saw in any case, need not be larger than that made by the smallest tenotomy knife, and would probably heal in twenty-four hours.

March 8, 1867.

* Dr. Brainard was accustomed to wait a "specified time" after drilling, to allow the callus to become softened before completing the operation. F. D. L.

The Alumni Association of Bellevue Hospital Medical College held their first regular meeting at Bellevue College, February 28, 1867, and adopted a constitution. They then elected the officers; who are in future, with the exception of the Recording Secretary, to be chosen annually. The following is the list of officers: For President, Dr. W. T. Lusk; Vice-President, Dr. J. U. Southack; Recording Secretary, E. S. Belden; Corresponding Secretary, Dr. L. M. Yale; Treasurer, Dr. H. Raphael; Executive Committee, Drs. L. B. Irish, J. Ferguson, Griffin H. Rockwell, J. B. Done, W. H. Van Wyck, C. A. Leal, W. C. Osteloh, F. A. Castle, W. A. James, B. S. Thompson, J. Cushman, P. R. Cortelyou, C. F. Roberts, and R. A. Vance. Prof. James R. Wood has offered to the association a prize of one hundred dollars, for the best essay on any subject connected with Surgical Pathology or Operative Surgery; to be awarded at the annual meeting in 1869, at which time the said essay is to be read. The Committee to examine the essays, and award the prize, is to consist of Professors W. H. Van Buren, Austin Flint, Sr., and Stephen Smith.

Original Lectures.

SCROFULOSIS AND TUBERCULOSIS.

BEING A LECTURE BEFORE THE CLASS OF

THE JEFFERSON MEDICAL COLLEGE.

SESSION 1866–7.

BY S. H. DICKSON, M.D.,

PROFESSOR OF THEORY AND PRACTICE OF MEDICINE.

PART III.

TUBERCULOSIS differs from scrofulosis in this, that supposing a general constitutional deterioration or cachexia, it has but one manifestation, we know it but one way, and that is by the deposit of a particular matter. It is, as Vogel calls it, a protein-compound consisting of an amorphous stroma (which is at first probably deposited in a fluid state), with some earthy salts, and with a certain amount of fat. There is albumen, as the base, or fibrine, unquestionably. We find it in various conditions, very rarely in the fluid state; rarely in the colloid or jelly-like; yet it is sometimes found so, as is affirmed by Carswell and others. When we first meet with it, generally it is as the grey or miliary tubercle. What is it? Who knows? Microscopists have failed to tell us clearly; the chemists have failed; there is great difference of opinion as to its nature. Addison says it is the white corpuscle of the blood "stagnated and converted;" Virchow says it is "inspissated pus;" if so a blood corpuscle, a pus corpuscle, and a tubercular corpuscle, are the same. You will find if you trace up the various opinions and conclude that concrete pus and tubercle are the same, you have nothing but the corpuscle to constitute this peculiar morbid matter, the very presence of which strikes every one with dread. At first we find it as grey matter; it soon degenerates into the yellow tubercle, distinguished chemically by a greater amount of adipose matter. Is this a degeneracy? If so, it would seem that we do not follow nature when we give the oily diet to a tuberculous patient. Robin doubts whether this grey matter is tubercle; he thinks it can be distinguished from it, and that tubercle is always deposited as the yellow matter. You find this grey matter in many positions in which the yellow is never found, as, for instance, in tubercular meningitis, to which many ascribe the presence of hydrocephalus. These little points which have been considered tubercular are of the grey tubercle, and never degenerate; the yellow mass is never found there. Virchow speaks of tubercle very contemptuously; he says it is a pitiful birth, a very small cell. The tuber never enlarges; the tubercle enlarges by agglutination, only differing from the cancer cell because it is larger. Virchow says, "if you do not know where it comes from, you do not know what it is;" and says that tubercle is nothing but concrete pus; and as the cancer cell differs only in size, you have no difference histologically between a pus corpuscle and a cancer cell.

As we meet with tubercle, it is most frequently found in the lung, and upon mucous surfaces. Carswell contends that it is upon the mucous surface that it is usually deposited. It takes the mould of the part on which it is placed. It must be deposited in a fluid state, but goes on to accumulate in masses. Louis says you will never meet with it elsewhere without finding it in the lung also. Wherever you do meet with tubercle it seems to have a particular tendency to fix itself in one part of that organ. Thus it is much more likely to be found in the apex of the lung than in any other part; so in a particular part of the brain rather than any other; it is found in the ileum rather than in any other part of the intestine. It is found in the cavity of the uterus at times. There is no organ of the body in which tubercle may not be deposited; but wherever found, it has a particular locality in reference to the structure of that organ where it is usually found. This peculiarity has not yet been explained.

The tubercle is usually contained within its own cell-wall, not in a cyst. It is debated whether it contains nuclei or not. All the changes which go on in the tubercle commence in the centre. Virchow speaks of it as a pitiful product. Carswell says it is unorganizable. It has been conveyed by inoculation to a healthy animal, and has there germinated. The highest proof of vitality that I can conceive of physiologically is the germinal power. This looks as if Laennec and Baron were right when they ascribe to it a sort of individuality. We find that a tubercle communicates tuberculosis from a diseased to a healthy animal; therefore it is not unorganized, unorganizable; it possesses its own vitality, which must be of high order.

How does a tubercle change from the centre? This fact was a great obstacle to those who believe it unorganizable. The most important change is softening, which begins the process of death in phthisis. A tubercle itself does not seem to be injurious but by softening. If you turn over Aitken's pages you find a remarkable contradiction; he admits on one page that it is often deposited independent of inflammation; read on a little further and he comes to speak of tuberculosis, and says we have hardly a right to speak of tubercular deposition—it is only a tubercular form of inflammation.

Tubercle is often entirely indolent. On the dissecting table you will meet with cases where you will find tubercle around which there is no change of condition or of the tissue in which it is deposited, inflammatory or otherwise; perhaps a little thickening or hardening, which may be the result of mere pressure; yet it is often deposited under the excitement of inflammation as a result of the hyperæmia which belongs to the history of tuberculosis.

Lebert says that tuberculosis attacks the internal organs; scrofulosis the skin and periosteum. We have attempted to show that scrofula does not occur from any one single cause; that a concurrence of circumstances must act upon the subject, and act slowly, to produce this cachexia. I believe that point may be considered as settled. Dr. McConahey, of Ohio, maintains the old belief that the use of the hog as food is the sole cause of scrofula, and that those only who use the hog in various modes as food are subject to it. I have no doubt that this animal, of all others used as food, is the most frequently diseased. All wild animals become tuberculated in confinement; I will not say scrofulous. I examined a lion who died in one of our menageries. I found tubercle in all the organs of the animal's body. Sauvag s calls the farcy of the horse a scrofula; monkeys in the zoological gardens die of consumption tuberculated. The horse is a very delicate animal when tampered by domestication. All domestic animals become delicate except the cat; this animal seems to retain its tenacity for its nine lives whether wild or tame, and is the only animal domesticated without deterioration of its powers of life. But while we find that scrofula is not very readily manifested primarily on the external surface in those subjects in whom we recognise the affection in the lymphatic glands as separate from tubercle,—while we are clear on this subject, as requiring climate, diet, atmospheric, hygienic, and other influences to produce this cachexia, we know that the separate, modified, or distinguishable

cachexia tuberculosis is producible rapidly and under morbidly favorable circumstances. If typhosis is tuberculosis—but when there is a deposit I suppose it to be tubercular, for we are told you cannot distinguish it from tubercle,—we find in typhus fever, very frequently, sudden tuberculosis. Bell says this is common in Glasgow, and you find it occur occasionally everywhere; both in true typhus, and perhaps more especially in typhoid fever, the patient frequently dies of tuberculosis—of the lung even—when not suspected of having tubercles. How is it produced? By the vitiation, shall we say, of the fluids? of the solids, too, then; how shall we make a distinction between them? The question has been asked concerning many cachexias and morbid diatheses, where do they arise, in the solids or in the fluids? I once thought it a matter of some consequence to determine this point; I now regard the solids and fluids physiologically as the same—the blood is floating flesh. If we believe the doctrine of correlation of forces we must believe that heat is a mere dynamic force, to use a tautology. I am not a believer in this doctrine, yet it has its value and there is a certain amount of truth in it. Take an egg in its natural condition; you say that it is fluid, nothing solid about it but the cell-wall; the yolk itself is composed of cells and is a fluid; but now you expose it to heat—a mode of motion, says Tindall—and what happens? Is there any difference, then? Can you say of an egg, as the source of all peculiarities as well of health as of disease, that it is the fluids or the solids which are concerned? By subtracting heat you cannot bring the egg back again to a state of fluidity, though you can water, which has been frozen solid, by supplying it. Thus we may argue that the fluids and solids are the same; it is a question of distinction without a difference. We do not know where the evil begins; everything is fluid, and everything is solid; the same atom fixed at one moment is flowing at the next. The blood is not a solution of solids in water, it is an interfusion of solids in water. It is impossible, physiologically or pathologically, to distinguish between fluids and solids.

The evil begins unquestionably, as we see, in the very germ itself. Fœtuses are born, dead perhaps, living perhaps, but tuberculated. There are two such instances mentioned in your text-book, of tubercles formed in the lung before birth. The child is often born scrofulous, as we see by the condition of the skin, so that both these forms are transmissible from the earliest periods of existence. The subsequent developments are different and therefore antithetic, and assist in separating them. When we deal with scrofula, everything we see on the surface is of an inflammatory character, modified; on the eye, on the face, little vesicular points containing lymph—I have watched them scores of times. This dries and a little ulcer forms, which heals for the most part readily; as soon as the ulcer ceases, the redness disappears, and everything is right except a little opaque spot. This will happen, sometimes, upon the cornea. You find the Meibomian glands exposed to irritation and inflammation; and scrofulous eyelids are very common; sometimes the resulting thickening will last a whole life, the patient being very susceptible to the formation of styes. The various cutaneous affections are all inflammatory; so are the affections of the glands; and the changes in the glands, notwithstanding Prof. Flint, whose book I so often press upon you as worthy your most careful study, says that the condition of the gland is very similar to the condition of the tuberculated swelling. Far from it; there is no tubercular deposit in the gland; it is a change there, corresponding to that going on in the formation of an abscess, and in the centre there will be formed pus; or in some part of it, after it thickens and hardens, like a common phlegmon, you will find it soften. Pus is formed in that strange way in which blood corpuscles are converted into pus corpuscles; but tubercular deposit does not take place; sometimes it will be laudable pus. Sometimes it breaks down, becomes oily, curdy, etc., but still it is inflammation, and is to be treated as such. You learn to do with it all that is necessary in the case of an abscess; you poultice it, you open it, so that it shall not cause an unsightly scar by opening of itself; but in tuberculosis this does not happen.

Every living thing increases and undergoes changes from the centre. It has been a great puzzle to many pathologists to know why tubercles soften, undergo their change, in the centre first, as a general rule; but so it does in the glands, though it is a different change. What is the change taking place in a tubercle? There are several such changes; one is the softening with which you have much to do in phthisis. This is a very important change; it is always attended, as far as we know, with inflammation around it; it excites inflammation near it, breaks and softens. It undergoes other changes which are contrasted with the softening, in that they tend towards the healing condition. Obsolescence is one; the tubercle seems to lose its normal form. Virchow insists that tubercle, itself, never masses itself; that it is an agglutinated condition; it always consists of grey masses of little tubers, which do not coalesce in their ordinary condition; they are always tubercles, therefore the appropriateness of the diminutive. Beale says that these changes in the centre are a peculiarity of life itself. When the obsolescence commences in the centre it becomes like old cheese, often as hard as horn, and in this state it is only mechanically an irritant for a little time, and becomes afterwards entirely indolent and does no harm. It undergoes another change. An absorption takes place of the animal matters, the albuminous and fatty, etc., leaving the earthy matters, and you have a cretaceous substance left there which is sometimes spit up, and the patient gets well, with a puckering of the lung. If it is not spit out, it is in an indolent condition, and is nothing more than a mechanical irritant. It is the softening of the tubercle that is a specific and dangerous element. Again, osseous matter is sometimes deposited strangely enough. Under what peculiarity of circumstances the tubercle becomes osseous, we do not know; but when it does become so, it is only a mechanical difficulty, and does not do any harm. Now, these changes do not occur in the scrofulous affections. They are marked in their difference in this respect, and thus we separate the two diseases to a certain extent. I acknowledge that they run together to a certain degree. Another writer says that scrofulosis is curable, and tuberculosis incurable. I do not think this is a matter of certainty. Le Grand maintains that in scrofula the blood is impoverished, and the inflammatory element is taken away; on the other hand, that tubercle implies the retention, at least, of that portion of the blood which is liable to inflammation. Ringer and Dr. Parkes have been making some careful experiments with the thermometer, and they maintain that in all cases while tuberculosis is going on, the heat of the body rises above the average rate—rises up to 102° F., perhaps—and this for a length of time. They do not give us any experiments upon the condition of the body while a scrofulous gland is undergoing inflammation. In many of these cases, the inflammation is enough to produce fever, and the thermometer would show the increase then. Sometimes they go on without affecting the constitution with fever. It is certain that when the tubercle begins to soften, this is the fact; hectic fever is fully developed, and the different parts

around the tubercle undergo a decided change. Not so with the scrofulous gland, which does not necessarily inflame the parts about it to any great degree, though there is, of course, some irritation of the parts around. It is important to get rid of scrofula, to understand the nature of the hygienic conditions which favor it, and the hygienic conditions opposed to it.

We do not know entirely the condition of savages, yet I do not believe that they are free altogether from tuberculosis; this can be built up suddenly. I do not know that there is any proof of scrofulous affections attacking the savage, or half-barbarous man, living in a wild state, and in a good climate. Our navigators tell us nothing of scrofula affecting the natives in the cold countries; and in warm climates, the frequent exposure to the open air prevents the occurrence of scrofula pretty effectually. We know less of scrofula in warm climates than in temperate and colder ones; not on account of the temperature, but on account of the housing up and avoiding of fresh air to protect from the cold.

Reports of Hospitals.

LONG ISLAND COLLEGE HOSPITAL.

Clinic of Prof. Austin Flint.

CASES OF HEART DISEASE.

Case I.— *Valvular Lesions: Aortic Direct, and Aortic Regurgitant Murmurs.*

History.—John Schantz, æt. fifty years, a shoemaker. He states that for several years he has experienced deficiency of breath on exercise, and occasional palpitation. Complains of a sense of distress referred to the præcordia, and latterly has suffered lancinating pain in this region, shooting through to the shoulder-blade. Seldom has cough; never had dropsy; pulse is feeble, somewhat irregular, quick, and jerking. Visible pulsations in the carotid arteries are strongly marked. He is notably anæmic; appetite poor; bowels regular. Never had articular rheumatism.

Physical Examination.—The pulmonary organs are normal. The impulse of the apex beat is in the fifth intercostal space, and falls in a vertical line passing through the nipple. Percussion reveals only moderate enlargement of the superficial or deep cardiac regions. On applying the stethoscope over different portions of the heart, two murmurs are discovered, viz. aortic direct, and aortic regurgitant. The latter has its maximum of intensity over the body of the organ, near the nipple. It is feeble, but still appreciable at the base. The former is heard loudest over the base of the heart. It occurs with the first sound, and is propagated into the carotids.

℞. Tinct. Ferri Mur., fl. ʒ i.
Sig. 20 drops three times a day.

Moderate exercise in the open air, and a nutritious diet, were also advised.

Progress of the Case.—March 20, patient has continued to take the medicine for two weeks. He reports that he feels better. The pain has left him, and his appetite and strength are improving. He was advised to continue the same plan of treatment, having reference to his anæmia and general condition.

Comments.—Endocardial murmurs are termed diastolic or systolic, according as they occur during the diastole or systole of the ventricles. Thus the mitral regurgitant and the aortic direct are systolic; the mitral direct and the aortic regurgitant are diastolic. Corresponding murmurs referred to the tricuspid and pulmonic semilunar valves are of extremely rare occurrence. The localization of cardiac murmurs does not involve so great a refinement in the application of the principles of physical exploration as those who have paid no attention to the subject are apt to imagine. Practice only is requisite to enable the auscultator to readily refer them to their proper source. It is only when the normal rhythm of the heart-sounds is greatly disturbed by irregular or excessive action, that much difficulty is experienced.

The points which require attention in the discrimination of murmurs are chiefly three, viz. the situation of the maximum of intensity, the direction in which they are best propagated, and their relation in point of time to the normal heart-sounds.

A murmur occurring with the first sound, heard with its maximum of intensity, at or near the apex of the heart, and best propagated laterally towards the lower angle of the scapula, can be no other than a mitral regurgitant. A murmur heard during the same interval of time, loudest at the base of the heart, and propagated in the direction of the large vessels, must be an aortic direct.

Again, if the murmur be confined to a circumscribed space near the apex, preceding and ending with the first sound, it is mitral direct. And lastly, if the murmur be heard over the body of the organ, occurring with the second sound, it is aortic regurgitant. This murmur has been erroneously stated to have its maximum of intensity over the base of the heart.

By due attention to these points, even when several murmurs coexist, they can generally be distinguished without difficulty.

It would appear that the mitral direct and the aortic regurgitant murmur, by both occurring in the same interval of time, and being heard over the same region of the heart, might occasion confusion; but, practically, these murmurs are as readily distinguished as others. The former is really more closely associated with the first than second sound. It is sometimes called presystolic. It begins feeble, and gradually increases in intensity, until it is finally cut short by the closure of the mitral valve. It also possesses a peculiar vibratory quality which is quite distinctive.

The aortic regurgitant, on the other hand, is more closely associated with the second than the first sound. It begins with its maximum of intensity and gradually dies away. It is often useful, in identifying the first sound, to recollect that it occurs synchronously with the impulse in the carotid artery.

Cardiac murmurs, although interesting as exemplifying the wonderful precision to which the art of physical diagnosis has attained, yet derive their chief practical importance from their connexion with the valvular lesions which they represent. We should never attach too great importance to the presence of a mere cardiac murmur, since neither the intensity nor quality of a murmur affords any criterion of the amount of damage which the valve has sustained. The most serious lesions are often found associated with feeble murmurs, and, *vice versâ*, a trivial lesion, which involves neither obstruction nor regurgitation, not unfrequently gives rise to a loud murmur. Thus a little roughness of the curtains or segments of a valve, caused by a small deposit of lymph in endocarditis, while occasioning but little or no impairment of its functions, may yet be sufficient to produce a very loud murmur. The term "Regurgitant," therefore, used to designate murmurs, is open to objection, as frequently involving a misnomer. Assuming that we possess the means, in any given case, of deciding whether

the lesion has actually occasioned insufficiency of the valve—and this point we may generally determine by characters relating to the pulse, diffusion of the murmur, and other signs—more expressive terms would be, "Aortic Diastolic with Regurgitation;" and so also, "Mitral Systolic with Regurgitation," or "Mitral Systolic without Regurgitation." We may, by means of the stethoscope, directly interrogate the valves in such a manner as to derive information respecting their physical condition, and thereby ascertain to what extent their function is impaired, if at all. This is an important application of auscultation, to which attention has especially been called of late. It consists in comparing the aortic and pulmonic second sounds by listening over the regions where they are respectively heard with their maximum of intensity. These regions are in the second intercostal spaces, near to the sternum, on the right side and on the left. Normally, the aortic second sound has a greater intensity than the pulmonic. Now, the effect of lesions involving obstruction or insufficiency of the valves is, after a time, to weaken the aortic second sound, and thereby render the pulmonic relatively more intense. Whenever, therefore, on comparing the aortic and pulmonic second sounds, we find their normal relation of intensity preserved, though a loud murmur should coëxist, we may yet safely infer that it denotes but a trivial lesion, and that the valve still performs its function well. It thus appears that endocardial murmurs, though interesting and important, as implying the existence, seat, and character of valvular lesions, are yet limited in their significance to these points. As regards the intrinsic nature and extent of these lesions, they give us little or no information. Aortic valvular lesions, as contrasted with mitral, present certain traits. Pain much more frequently accompanies the former. Their pathological phenomena are most apt to be manifested primarily in the heart itself, while those of mitral lesions are manifested primarily in the pulmonary organs.

Finally, as relating to prognosis, aortic lesions, when occasioning great obstruction or regurgitation, by tending directly to induce dilatation and weakening of the left ventricle, involve a greater liability to sudden death.

JEFFERSON MEDICAL COLLEGE,

PHILADELPHIA.

SURGICAL CLINIC OF PROF. GROSS.

SATURDAY, DECEMBER 22, 1866.

Scirrhus of the Mammary Gland, with Atrophy—Removal.—A mammary gland has just been removed from Mrs. S——, æt. 45, well nourished. In the upper part of the tumor there is a cyst which was surrounded, when cut into, with firm, hard, whitish walls. Scirrhus may form the walls of this cyst, for when opened there escapes a brownish, chocolate-colored fluid. There is very little of the glandular structure left in the tumor, it having become atrophied, but there is an immense amount of adipose tissue—much more than I have ever witnessed in proportion to the size of the tumor. The retraction of the nipple is very marked in this case, the existence of which retraction is one of the most diagnostic symptoms in doubtful cases. There was very little hardness and swelling, and the patient's general health is most excellent.

I saw this patient a few months ago at my office, and expressed doubts as to the nature of the case, and gave her strict injunctions to keep her hands and fingers off the organ. Yesterday she returned, and I found the nipple retracted, in a slight degree as yet, but well marked, although there was no considerable induration or enlargement anywhere; and I therefore advised her, as a matter of safety, to submit to the operation which has just been performed.

Sometimes, especially in women far advanced in life, we occasionally meet with a form of scirrhus of the mammary gland, a tumor not larger than the smallest pullet's egg, or an almond in its shell. This is scirrhus of the atrophic variety—scirrhus combined with atrophy of the mammary gland—an uncommon occurrence, and one in which the prognosis is as a general rule rather favorable. The patient may frequently live a number of years without any tendency to ulceration or lymphatic involvement, or constitutional contamination; and if the operation be finally performed, there will be less disposition to a recurrence of the disease at the sutures in the neighborhood of the wound, or in other parts of the body.

The best plan is not to excise the mammary gland when in this condition, but to let it alone. The patient may live for years, and die from some intercurrent disease, without the affection of the mammary gland taking on any diseased action.

In dressing the wound left after the removal of the mammary gland, I prefer long and narrow strips to broad ones, on account of greater facility for drainage. In addition to the strips crossing each other in different directions, we make use of the compress to bring the contiguous surfaces in contact with each other everywhere. The adhesive strips do this to some extent, but not firmly, and therefore we aid them by the application of an oiled compress, not too large, for that would encumber the parts and render them too warm. Attention to this point is a matter of great importance. Then the compress should be confined by a roller bandage passed around the chest. The dressings should be removed at the expiration of the third day, or sooner if there is any considerable discharge. If the dressing remains perfectly sweet, it need not be disturbed for four, five, or six days, according to circumstances.

SATURDAY, DECEMBER 29, 1866.

Chronic Abscess of the Thigh.—Clara B——, æt. 12, has an abscess upon the thigh, which was first noticed eight weeks ago. It began apparently spontaneously, with great pains in the upper portion of the thigh. The patient has also Potts' disease of the spine, a large curvature low down posteriorly. These parts are consolidated; the chasm which formerly existed having been bridged over with callus or new bone.

With regard to the abscess: we have here an affection coming on two months ago, engrafted upon a constitution not very strong, with general health not very good, occurring in a scrofulous state of the system as indicated by the Potts' disease of the spine existing at a former period, but now perfectly well. There is a large swelling upon the outer and upper portion of the right thigh; there is discoloration over a considerable space; also some enlargement of the subcutaneous veins, which are seen swollen and congested; there is very great heat in the swelling—very much greater than the heat of the limb below it, and considerably greater than the temperature of the limb above it; there is, therefore, inflammation. The patient has shooting pains occasionally, but the pain is not sufficient to prevent sleep at night; feels chilly sometimes, and the feet are always cold.

The swelling is not hard; the finger sinks in it very readily, not indenting the parts as in anasarca or œdema, for the moment the finger is removed, the parts resume their former condition. Palpation evinces fluctuation—the presence of a fluid.

The question arises, what is the nature of this fluid? is it blood? is it water? is it pus? If it be blood, its existence would imply the infliction of violence, or the existence of a rupture of some of the blood-vessels of the part, either spontaneously, or as the result of injury or of disease. There has been nothing of this kind in the history of the case; it came on without any assignable cause; therefore we exclude that view from the diagnosis. With regard to its being an accumulation of water; the disease is of two months standing, and there is nothing in the history of the case which would afford reason to believe that there is anything of this kind, which would imply the presence of a cystic tumor, or an accumulation as occasionally happens in the connective cellular tissue beneath the skin, or between the muscles and the skin. Then we come to the consideration, is it pus? It is undoubtedly of that description; the tumor has been growing steadily with all the evidences of inflammation. Then it is an abscess. Is it a phlegmonous, or a chronic strumous abscess? The previous history gives evidence of its being a strumous abscess; the disease is chronic. A phlegmonous abscess is rapid in its formation, and attended with a great deal of pain. The disease is simply a reflection of this peculiar strumous diathesis, which has prevailed probably ever since the birth of the child, to a greater or less extent, displaying itself at about the fourth year of age by Potts' disease of the spine. The abscess, which is quite large, is situated superficially in the subcutaneous cellular tissue; I have no idea that it communicates with the articulation. The child has been becoming lame for the last six or seven months; this right leg was stiff and she could not bend it. It is therefore possible that there may be some complication with hip-joint disease, but the existence of such a condition of things is doubtful. The child has had no rigors, nor night-sweats. This abscess is lined by a pyogenic membrane, formed out of the fibrine or lymph of the blood thrown out by the process of inflammation, in which the pus is contained, by which it is surrounded and circumscribed, by which its diffusion among the surrounding structures is prevented. Such an abscess may exist for many months without awakening any considerable degree of constitutional disturbance or sympathetic derangement, as long as it is permitted to have its own course; but when interfered with, by an opening being made so as to allow of the ingress of the air, then severe constitutional symptoms are excited, sympathetic irritation is provoked, followed by hectic irritation, or hectic fever, as commonly called; in other words, by night-sweats, by great depression of the system at large, by exhaustion, by a sort of typhoid condition of the system, and sometimes by colliquative diarrhœa. When these symptoms prevail, there is great danger with regard to the life of the individual, and it is exactly the same thing which prevails in the latter stages of consumption, in affections of the hip-joint, also in affections of the knee-joint, the larger articulations; the same thing which occurs not unfrequently in scrofulous diseases of the bones, especially the smaller bones, and the articular extremities of the long bones.

The question arises, what should be done in a case of this kind? The matter is making rapid progress, and by its pressure produces in the skin unnatural heat, unnatural discoloration, a congested condition of the blood-vessels of the part, of the veins especially. There is a tendency, therefore, over a considerable surface, to ulceration, which is hastened or promoted by the pressure which the pus itself exercises on the skin; and if the parts are permitted to remain in this condition, the pus will force a vent or opening for itself in a comparatively short period; perhaps within the next ten or twelve days; perhaps sooner. I propose therefore to anticipate this opening, making an incision at the most dependent portion of the abscess, so as to give free vent to the fluid as fast as it is deposited within this pyogenic sac; then, by means of pressure made with a compress and adhesive strips, we shall bring together the opposite surfaces of the abscess, and in this manner diminish its cavity, and, at the same time, guard against the introduction of the air as much as possible. The air itself is comparatively innocuous, but when it is brought in contact with pus in an abscess, it leads to a decomposition of the pus, or putrefaction, and in this way becomes a source of irritation. Whether the pus is absorbed into the system or not, simply by its contact with the pyogenic membrane, or the surface with which it lies in contact, some may get into the blood and poison it; its contact with the affected surface is sufficient to bring about this local and systemic irritation which we call pyæmia. We transfix the wound produced by the puncture with a pin, and then cover it in with adhesive strips. Should the edge unite, it will be very easy to make another puncture in a few days in order to let out some more pus. Immediately after the operation we give the child a full dose (twenty-five drops) of laudanum, which is less likely to produce perspiration than morphia, to prevent undue reaction after the performance of the operation. It is well *always* to anticipate this reaction, and, if possible, to prevent it. A full anodyne will quiet the system, quiet the heat, and conduce to sleep. Then, it will be well to put the patient gradually on the use of quinine and aromatic sulphuric acid, two grains of the alkaloid with twelve drops of the acid, four times in the twenty-four hours. Sulphuric acid is the great remedy in colliquative sweats and hectic irritation.

The pus drawn from this abscess, eighteen ounces in quantity, contains a large quantity of fatty matter, and large peculiar flakes, looking like soft-boiled rice, much like the pus expectorated after cavities have formed in pulmonary consumption; the thinner portions will remain on the surface, and the caseous portion will subside to the bottom, and the supernatant liquid will present a sort of oleaginous appearance. This operation may be repeated in a week or ten days, and finally, when the system has become inured or accustomed to the suffering, the abscess must be opened freely, a tent be inserted in the bottom, so as to give the parts a chance to heal by the granulating process; or a seton may be inserted through the walls and be allowed to remain thirty-six or forty-eight hours, and some irritating fluid, as a weak solution of the tincture of iodine, may be injected; but I prefer to lay open the abscess freely, not immediately, except where it is very superficial, as on the chest, with the view of exciting the granulating process; but in a case like the present it is better to proceed more cautiously. The patient must be provided with a nutritious diet.

Dangers of "Waterfalls."—According to the authority of M. Linderman, a Russian savant, seventy-five per cent. of the false hair used for chignons in Russia, is invested with a parasite to which the name of gregarine is given. This hair is very like other hair in appearance, but on close inspection little dark-brown knots are seen at its free end, and may even be distinguished by the naked eye. These are the parasites. It has been found very difficult to destroy them with any reagents that will not also destroy the hair. The presence of gregarines is doubtless due to the filthy habits of the women who supply the hair to the different markets.

Progress of Medical Science.

POLYPUS OF THE PROSTATIC PORTION OF THE URETHRA.—A case is related in the "*Union Médicale*" of October 6, of a young man who was troubled with his urine, and had seminal emissions. He submitted to cauterization of the prostatic portion of the urethra with Lallemand's porte-caustique, and the surgeon in withdrawing it met with a painful resistance which he supposed to be caused by a mucous fold of the urethra caught in the instrument in sheathing it; but on removing the instrument a urethral polypus accompanied it, and was found to have been the cause of the urinary disturbance.

TEMPERATURE OF THE BODY IN CONVULSIVE DISEASES.—Drs. Charcot and Bouchard state that there is no sensible increase of the general temperature of the body during the clonic contractions of muscles. The augmentation of temperature due to muscular contraction, as in epilepsy, occurs only during the tonic contractions. They assert that in the most marked forms of paralysis agitans, and in chorea, there is no appreciable increase of the animal heat. These opinions are sustained by their physiological essays on cats and rabbits, which animals were thrown into convulsions by injections of sulphate of strychnia, or by the application of electricity. The bulb of a thermometer placed in the rectum of the animal enabled the experimenters to note the variations of the instrument as the tonic convulsions succeeded or preceded the clonic contractions.—*Gazette Médicale of Paris.*

INFLUENCE OF VASO-MOTOR NERVES OVER SECRETION.—M. Brébant, of Reims, has put forward a theory of the relative action of the sympathetic and ordinary nerves, which is different from that of M. Bernard, and which seems plausible enough at first sight. Taking the submaxillary gland as an illustration, he says this organ is provided with two distinct sets of nerves: the chorda tympani, and the filaments of the sympathetic system. The sphincters of the vessels of inosculation obey the chorda tympani, and those of the capillaries obey the sympathetic. If no excito-motor action excites the chorda tympani, the vessels of inosculation remain open, and the blood passing from one set of vessels to the other does not enter the minute capillaries; consequently there is no secretion: the gland remains inactive. If, on the contrary, says M. Brébant, the chorda tympani is called into action, it produces contraction of the sphincters of the inosculating vessels, and these latter being closed, the blood flows on to the ultimate capillaries, and thus secretion takes place.—*Lancet.*

SEQUELÆ OF SURGICAL OPERATIONS.—M. Maisonneuve thinks that of every hundred patients who die after surgical operations at least *ninety-five* are poisoned. This he explains by showing that in most cases of the kind referred to, certain morbid products, the result of the operation, are developed either in the blood or on the surface of the body, and make their way into the system. He formulates his remarks thus:—(1) The blood and other animal fluids, when exposed freely to the air, or in contact with aqueous substances, soon lose their vitality. (2) Once dead, they are liable to putrefy under the influence of heat, moisture, and air. (3) The products of such putrefaction are highly poisonous. (4) It is the same with such secretions as the urine, bile, and intestinal juices. (5) In infiltrating the permeable tissues with which they are in contact, these poisoned liquids give rise to gangrene, erysipelas, &c. (6) These same liquids, either by themselves or mixed with the special products of inflammation they provoke, can, in entering the circulation, alter the blood and disturb important functions. (7) After their expulsion from the general blood-vessels they may remain in the capillaries, the parenchymata, serous tissue, &c., and give rise to abscess, anthrax, &c. (8) The entirety of the disturbances constitutes surgical fevers. To prevent these terrible consequences of operation, M. Maisonneuve suggests the adoption of the subcutaneous method, and the employment of all means of preventing putrefactive process.—*Lancet.*

CLEANING BUILDINGS BY STEAM.—A new process for cleaning the façades of public buildings and dwelling-houses is now being experimented on in Paris. A steam-engine supplies pipes of gutta-percha with a constant stream of the vapor. These are applied to the stone of the brick surface of buildings, one man directing the steam jet and the other using a brush. The building, after the application of this system, looks as clean and new as when erected. A couple of men in three days will thus wash the façade of a hotel at a great economy of time and money over the old mode of cleansing.—*American Artisan.*

BLISTERING is a favorite remedy with many practitioners, and is resorted to for various purposes. Not long ago all internal inflammations were treated by external vesication, perhaps solely from its supposed derivative or substitutive effect. Puerperal inflammation once combated with venesection, mercurialization, and extensive external vesication, is now more successfully treated with anodynes, and simple fomentations. Inflammation of the lungs and pleura, formerly treated by the whole armament of depletion, is now in the best manner controlled by rest, position, and anodynes, the blistering, bleeding, and starvation wholly omitted. Inflammation of the eye, in its various forms, formerly submitted to leeching, blistering, cauterizing, low diet, etc., is not often at the present time subjected to the action of such remedies, but terminates more safely under milder measures. The diseases most eminently requiring, as supposed, the action of these remedies, are now known to recover as rapidly and certainly without them, and thus we are furnished with presumptive evidence, at least, that they are nearly, perhaps wholly incapable of good better, if we could also add of harm, but we are obliged to confess, that if unproductive of good, they are yet potent for evil.—*Dr. Julius F. Miner, Buffalo Med. and Surg. Jour.*

THE URETHRA VIEWED BY A MAGNESIUM LIGHT.—Dr. E. Andrews, in an article upon this subject in the *Chicago Medical Examiner*, says, "Some months ago I had an endoscope constructed after the Parisian plan, and used it with some degree of satisfaction; but there is often a deficiency of light in these instruments, rendering the view unsatisfactory, unless all parts are in perfect order. Seeking to overcome this evil, I one day procured some small magnesium wire, which, when held in the flame of a lamp, burns with a white light, whose brilliancy dazzles like the glare of the sun at noonday. Introducing the endoscope into the urethra of a patient, I caused a friend to insert the wire into the flame of the lamp. The result was to illuminate the urethra magnificently. The mucous membrane, with every little fold or patch of varied color, was as plainly in view as could possibly be desired. It could not have been seen any better had it been dissected and laid in the sunlight. By gradually withdrawing the tube, the whole of the canal may successively be seen

as it collapses across the end of the tube. Seeing the perfection of this illumination, I have ordered a spring and some small wheel-work attached to the lamp, so that the wire may be made to advance into the flame without the help of an assistant. In this way, no doubt, the difficulty of the illumination will be fully overcome, and the urethra can be inspected almost as easily, and quite as perfectly, as the tongue."

TREATMENT OF GONORRHŒA—Mr. Barwell has for years past treated gonorrhœa as a simple non-specific disease, avoiding copaiba, which, by disordering the stomach and causing loss of appetite, depresses the health, and is apt to increase or lengthen the disease. In case of a first attack, in which inflammation runs high, a purge, hot bathing, and an alkaline medicine, either diuretic or aperient, as may be indicated, followed by an injection of sulphate of zinc—two grains to the ounce. Second or subsequent attacks may be treated without such preparation by injection, free action of the bowels being secured, if necessary, by medicine. If the patient apply on the first day of the discharge showing itself, a week may often suffice to check it. More chronic cases may be advantageously treated with tannic acid—three or four grains to the ounce: and, in order that the fluid may remain longer in contact with the mucous membrane, it may be thickened with starch or sugar. Mr. Barwell has not found that orchitis follows the use of injections of the above strength more frequently than it succeeds to gonorrhœa not locally treated; and stricture is certainly a rarer sequela to such treatment than to a clap allowed to run on for weeks or months. The slight but continuous discharge of a gonorrhœa become chronic is often difficult of cure. Turpentine, either Chian turpentine or Canada balsam, with black or Cayenne pepper, is frequently useful. Tincture of steel and tincture of capsicum often avails. As a pepper, cubebs will have a similar effect; but it is not better, and is more clumsy, than the above-named sorts. The most certain and efficacious treatment is by an ointment containing from three to five, and even to ten, grains of nitrate of silver to the ounce of lard. A small bougie smeared thickly with the ointment is passed from half an inch to an inch and a half down the urethra, and left there for half a minute or more; and this should be repeated at least every other day. In general, commencing with the mildest ointment, one need not increase the strength beyond five grains to the ounce. In only one very obstinate case was it used ten grains to the ounce; but the patient got well without a bad symptom.—*Lancet.*

THE INOCULABILITY OF TUBERCLE.—A very interesting communication has been made to the Pathological Society by the President (Mr. Simon, F.R.S.), in reference to the production of tuberculosis by inoculation. Mr. Simon said he had followed up the novel experiments of Continental observers, and had succeeded, by the introduction of the tuberculous matter, in producing tuberculous deposit in several rabbits, some of whom belonging to the same litter on whom this experiment had not been performed were entirely free from any disease of the kind. In the case of rabbits inoculated with matter obtained from other rabbits in whom tuberculosis had been produced, the development of tubercle was much more general through the lungs and the body (and also in greater amount), as though the tubercle had become acclimatized, so to speak, to the system of the rabbits. In one case, that of a doe, the only apparent effect was to cause every fresh litter to be still-born. Mr. Simon observed that his experiments seemed to show that the disease was produced as well when the yellow tubercular deposit was used as when the grey granulation material was employed. Dr. Andrew Clark recounted his own researches on the subject, and suggested that it would be desirable to suspend judgment upon the question in consequence of the startling inferences that would necessarily be drawn if such experiments were accepted as true. He thought that sufficient arguments were at hand to call in question the results of the experiments of Continental observers. In the first place, the deposit in the rabbit was essentially cellular, whereas the grey granulation of tubercle was corpuscular. He had never seen the secondary concomitants in the case of the disease induced artificially in rabbits, such as pneumonia and the like. The condition described as tuberculization might be produced by introducing any aplastic fluid into the system; and the experiments already recorded by different observers seemed in some measure contradictory: some of them producing the artificial tuberculization with yellow, others with grey tuberculous matter.

The specimens of Mr. Simon, handed round, showed to all appearances tubercular matter; and they were referred to a committee for a report. The facts relative to these pathological specimens are of great interest, as the reception given to Mr. Simon's remarks clearly indicated.—*Lancet.*

ELECTROLYTIC TREATMENT OF TUMORS.—At a meeting of the London Medical Society, Dr. Althaus read a paper on the electrolytic treatment of tumors, this consisting in the passing of a continuous current of electricity through the structure to be operated upon from the negative pole of a battery. He exhibited a very ingenious battery, and a variety of instruments to be used in this process, and showed their effects on saline solutions, albumen, and muscle. The diseases best suited for this plan of treatment were tumors such as nævus, bronchocele, hydatids, cancer, etc., aneurisms, varicose veins and piles, serous effusions and strictures, as it caused no bleeding, little or no pain or shock, no sloughing, or other bad effect. He had used it with apparent good effect in cases of bronchocele, scirrhus, and molluscum, but thought it capable of much wider extension. Mr. W. Cooke suggested that as the effects were so local, and as the introduction of the needles into the tumor would always give rise to a certain amount of irritation, the tumor if cancerous might grow faster than it was destroyed. Dr. Handfield Jones had tried it for the removal of a wart, but had found the pain intense. Dr. J. Brown thought the treatment took too much time to be substituted for such a simple operation as that for piles. Dr. Sansom thought the stimulus of the vaso-motory nerves, and the consequent diminution of the quantity of blood supplied to the part, might have as much to do with the lessening of the tumor as any mechanical or chemical action induced by the current.—*Med. Times and Gazette.*

THE BERLIN WARE so much celebrated for its power of withstanding heat, acids, and alkalies, is composed, according to Dingler's *Polytechnic Journal*, of 45 parts kaolin, 37½ alumina, and 16½ felspar. The enamel is composed of 42 parts sand, 33 kaolin, 13 unburnt gypsum, and 12 of the baked body composition above described.—*Scientific Am.*

CHOREA TREATED BY ETHER SPRAY.—A case of obstinate chorea successfully treated by ether spray, has been reported by Dr. Lubelski, in a recent number of the *Gazette Hebdomadaire.* The vapor was thrown upon the sides of the spinal column by means of the double-nozzled apparatus of Richardson.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA

New York, May 1, 1867.

THE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

ONE of the medical events of the year will be the meeting of the American Medical Association, which is to be held in Cincinnati, on the 7th, 8th, and 9th of this month. The locality has been happily selected, and from the fact of its being a central one, will no doubt call forth a large attendance of delegates. But we are not to look to this alone as an indication of a full meeting. Last year we had occasion to notice the paucity of Southern members, and to deplore the existence of any supposed political misunderstanding which might account for it. This, if it even did exist, is now, we trust, numbered with the things that were. The civil war is long enough over to heal all the festering sores which party prejudice has given rise to; and we may reasonably expect a considerable accession of members from the South, among whom will be many beloved and respected and too long absented brothers.

We cannot predict that the meeting will be more than an ordinary one, in which the usual number of reports and resolutions will be offered, unless there be a little diversion upon the subject of specialties. This will undoubtedly be brought up, and will be as much if not more talked about than at the last session. But is the Association any better prepared to discuss it than one year ago? Certainly not; and after all, if it were ready and willing to look at it with an unprejudiced view, no good would come of any legislation upon the subject. No well qualified specialist will feel himself called upon to abandon his field of practice, simply because the American Medical Association sees fit to command him so to do; neither will the general practitioners concede that the specialists are orthodox, because a majority vote in favor of them. Specialism is in its youth in this country, and its real merits or demerits have not yet been fully appreciated. If it have any merits they will become apparent after a while, without any special anticipatory or puffing resolutions. The same can be said regarding its shortcomings. A great mistake has been made in agitating the subject too much, and giving it an undue importance. If it were possible for some of the specialists and anti-specialists to hold their peace at the coming meeting, no one would suffer, and all would be benefited by the amount of time gained. We cannot, however, hope for this, and must come prepared to hear the same old arguments, the same pleading for protection of rights, the same call for sympathy with injured innocence, and the same show of eloquence which have characterized other discussions of the sort; and we can assure ourselves in advance, that the result will be the same.

If the Convention of Medical Teachers bring in their report much interest will be added to the meeting. We have no doubt the measures which the professors may recommend will be practicable and sensible; and the Association will have much to base a discussion upon. In this event they will have the subject of medical education presented before them in a tangible form, and may be encouraged to legislate upon it in the hope that such action may accomplish some good. If the convention of teachers agree to come at the question with the right spirit and in the proper way, they may hope for a hearty endorsement of their views by the Association, and a prompt action upon the propositions which they may advance.

An interesting feature in last year's meeting, was the delivery of a lecture before the Association. This was so well received that the committee of arrangements should take the hint, and provide for a repetition of that part of the programme by the selection of some suitable person who could offer remarks upon a subject of interest to all. We would venture to say, that more were benefited by the discourse on nervous affections than by any other topic, not even excepting that of cholera.

The Association will be better prepared to discuss the propriety of quarantine than last year, as many of those who voted against it then have had ample opportunity to change their views. A proper decision of this question involves great interest; and if the subject is brought up at all, it is to be hoped that a calm and deliberate vote be taken, and that the body clears itself of the stigma which still rests upon the action taken last year.

The meetings of the sections, which may be considered as interesting and profitable as any of the Association proper, should be well attended; and in order that more business can be transacted than is usual, each gentleman who proposes to read a paper, especially if the latter is a lengthy one, should be prepared to present only an abstract of the same. In this way two or three articles could be laid before the section in the time which it has ordinarily taken to read one entire. The sessions are necessarily short, and too much time cannot be given to one document to the exclusion of other equally meritorious ones. The entire paper could be handed to the Committee on Publication, the abstract being prepared only for the sake of the discussion it may elicit.

The places of meeting of the sections should be as near together as possible, and within a short distance of the general assembly hall. This would enable more members to be present, and the interest in the meetings would be proportionably promoted. We have no doubt, however, that our brethren of Cincinnati will do all for the delegates which can be done, to make the visit to the Queen of the West as agreeable as we hope it will be profitable.

In our last issue we took occasion to refer to the fact that the religious press, as represented by the *North-Western Christian Advocate*, of Chicago, had opened its columns to the discussion of criminal abortion. The article in question is understood to have been written by the Rev. Arthur Edwards, the associate editor, long and favorably known in the religious world. Since then, *The Congregationalist*, of Boston, in a recent issue, publishes another article bearing upon the same subject, under the caption, "Fashionable Murder." The author, the Rev. Dr. John Todd, of Pittsfield, Mass., from whose "Student's Manual," in our boyhood, we derived many an ambitious impulse, and who will be at once recognised by some of our readers as one of the original thinkers of the day, addresses himself to the task with his usual vigor.

He says very truly, after complimenting the medical profession as a class for their noble stand: "Even now, as I have reason to fear, *all* the profession are not beyond the reach of personal appeal, or an enormous fee; and I do wish that every such a one could see that a fee steeped in blood and crimsoned with shame, cannot bring a blessing to his family." We regret that our limited space forbids more liberal quotations from the article, but cannot refrain from giving the closing paragraphs:

"If it be said that I have in any measure exaggerated the evil and the fashion of the day, I reply, I would not advise any one to challenge further disclosures—else we can show that France with all her atheism, that Paris with all her license, is not so guilty in this respect as is staid New England at the present hour. Facts can be adduced that will make the ears tingle. But we don't want to divulge them; but we do want the womanhood of our day to understand that the thing can be no longer concealed, that commonness or fashion cannot do away with its awful guilt. It is deliberate, cold murder; and if anything short of the murderer's doom shall fall upon the perpetrators of it at the judgment, the reason will be that there has been great ignorance of its guilt.

"I have now done a painful duty, and have done it fearlessly. To the attention of the gentle, tender heart and conscience of woman I commend this subject with earnest prayer."

In this connexion we may state that the late President of the New York Academy read before that body, at its last session, the copy of a bill before the Legislature, which strikes at the root of the evil by making it a misdemeanor, punishable with fine and imprisonment, to circulate infamous publications throughout the State. Thus the agitation of this question of "voluntary abortion," inaugurated by the profession, has already begun to manifest its influence in circles which are more apt than our own to work reform, because gifted with a greater executive power.

Reviews.

THE SCIENCE AND PRACTICE OF MEDICINE. By WILLIAM AITKEN, M.D., Edinburgh; Prof. of Pathology in the Army Medical School; Corresponding Member of the Royal Imperial Society of Physicians of Vienna; of the Society of Medicine and Natural History of Dresden, etc., etc. In 2 volumes. From the fourth London edition; with additions by MEREDITH CLYMER, M.D., late Professor of the Institutes and Practice of Medicine in the University of New York; formerly Consulting Physician to the Philadelphia Hospital, etc. Philadelphia: Lindsay & Blakiston. 1866. 8vo. pp. 955 and 1114.

THE author tells us in his preface that in the compilation of this hand-book he has attempted to give a condensed view of the existing state of the science and practice of medicine. His plan has been carried out to that perfection that the treatise is as complete a one as can be found in any language. Every department of medicine, whether relating to pathology, nosology, diagnosis, or treatment, is most elaborately and thoroughly discussed. One of the most important features of the work is that assigned to the department of medical geography, or the geographical distribution of health and disease. In this section a philosophical study of the distribution of diseases is taken up, particularly in relation to the physical condition of the earth's surface, and to the variations of their types in the different regions of the earth. This important branch, which has lately received so much attention as associated with sanitary science, has, for the first time, been regularly incorporated in a systematic work. The other subjects in the work receive their proportionate amount of attention, and there is everywhere manifest a care on the part of the author to give all the information to his readers which the most extensive research and study are capable of. The editor, Dr. Meredith Clymer, has contributed his share to the work, by many judicious additions to the original text, which makes the work particularly valuable to the American practitioner. Among them may be named articles on the typho-malarial fever, chronic camp dysentery, cholera infantum, aphasia, and the treatment of the diseases of the respiratory organs by atomized fluids. The work, as a whole, now forms a complete cyclopædia of medicine, and commends itself to those practitioners and students who have a desire to perfect their knowledge of our art, and gain much of that information which is crowded out of the smaller text-books.

The publishers deserve credit, not only for the style in which they have got up the work, but for their enterprise in reproducing such a valuable addition to medical literature.

CONTRIBUTIONS TO THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF ANGULAR CURVATURE OF THE SPINE. By BENJAMIN LEE, M.D. Philadelphia: J. B. Lippincott & Co. 1867. 12mo., pp. 129.

THIS little book is written for the purpose of pointing out the necessity for proper mechanical support in cases

of angular curvature of the spine. The author starts with the proposition that the disease is generally of the nature of a simple inflammation, often the result of external violence, and in order to treat the affection properly, maintains that the vertebræ must be in a state of rest by being relieved from pressure. If this is not done, disastrous results follow, in the shape of caries and deformity. He takes occasion, in the course of his monograph, to cry out against the practice so rife amongst most practitioners, viz. counter-irritation, as not only irrational but cruel, as it oftentimes, if not invariably, increases the existing inflammation, and adds to the discomfort of the patient. The apparatus which he advises is the one known as Dr. Taylor's, which has for its object the unbending of the abnormally curved spine, by the adaptation of an appliance which is curved in the opposite direction, the oblique processes being used as the fulcrum. The principles of treatment are clearly and logically put, and the cases which are detailed conclusively demonstrate their value. It is a very practical and useful little work, and should be read by every practitioner who may be unfortunate enough to hold to the old-fashioned views concerning the pathology and treatment of this very prevalent and heretofore almost incurable disease. Dr. Lee has devoted himself for some years past to the study of mechanical therapeutics, and has done good service to his professional brethren in embodying his views in this neat, useful, not to say attractive, volume.

INJURIES OF THE SPINE, WITH AN ANALYSIS OF NEARLY FOUR HUNDRED CASES. By JOHN ASHHURST, Jr., A.M., M.D., Fellow of the College of Physicians of Philadelphia; Member of the Academy of Natural Sciences at Philadelphia. J. B. Lippincott & Co. London: Trübner & Co. 1867. 12mo, pp. 127.

INJURIES of the spine have not been studied as they should be. This is in part due to the fact that the cases which are subject to such accidents have been confessedly hopeless; and that there has been no incentive to research. Again, the cases are not of very frequent occurrence compared with other surgical troubles more interesting to study, and more amenable to treatment. Dr. Ashhurst, with an industry that deserves the thanks and appreciation of his brethren, has given us a work which will be considered authoritative, and which must necessarily form the basis for all future monographs upon the subject. His cases, nearly four hundred in number, have been collected from every available source, and have been analysed with rare skill and judgment. He has directed his energies principally towards deciding many questionable points in the pathology and treatment of injuries of the spine, and has been enabled to arrive at the following conclusions:—

"1. Injuries of the spine are not nearly so fatal as is generally supposed, and they have been, not unfrequently, completely recovered from. 2. By watching the symptoms and knowing the lesions which they indicate, the patient's progress towards health or death can be pretty accurately foreseen in most cases. 3. Whenever there is reason to believe that one or more vertebræ have been displaced, extension should be employed temporarily, if that be sufficient; if not, continuously. 4. In no case do resection or trephining offer a reasonable prospect of improving the patient's condition, but on the contrary there is reason to fear that they would increase the chances of a fatal termination. 5. Those cases of spinal injury which are not adapted for the employment of extension should be treated in accordance with ordinary rational and physiological principles. 6. No new mode of treatment is entitled to adoption in a class of injuries so serious as this, unless it can be shown by clinical experience that it is at any rate not less successful than the modes commended to us alike by reason and long experience." The appendix is occupied by an elaborate tabulation of 394 cases. Twenty-six of these were cases in which resection of the spine has been performed for traumatic injuries, and but one of all this number was relieved by such treatment. The book is got up in handsome shape, on tinted paper, and tastily bound.

Reports of Societies.

N. Y. PATHOLOGICAL SOCIETY.

STATED MEETING, JANUARY 23, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

RUPTURE OF LIVER:—HYDATIDS.

DR. WOOD exhibited a specimen of rupture of the liver and hydatids of that organ. The patient was found by a policeman lying across the railroad track in Chambers street, and was soon after admitted into Bellevue Hospital in a collapsed state. Death took place at the end of two hours after admission.

On opening the thoracic cavity, a considerable quantity of blood was found in the right pleural sac, and between the oblique muscles of that side of the abdomen, a large amount of blood was effused. Of the existence of this latter lesion there was ample evidence during life in a notable prominence in the right hypochondrium, attended with dulness on percussion. A large quantity of blood was also found in the abdominal cavity. The right lobe of the liver was extensively ruptured, as well as the diaphragm, affording a free communication between the two visceral cavities. The ninth rib was fractured, and the intercostal muscle between that and the rib above was torn. In the track of the laceration several well developed hydatid cysts were discovered.

NECROSIS OF ENTIRE RAMUS OF LOWER JAW.

Dr. POST exhibited a specimen of necrosis of almost the entire ramus of the lower jaw, which he had removed from a little girl eight years old. About eighteen months ago, the patient first complained of toothache, and that side of the jaw became in consequence much swollen. An abscess formed. Two weeks ago she was presented to the clinic of the professor, when on examination of the part denuded bone was discovered. The exposed portion of the necrotic mass was seized with the forceps, and the specimen was extracted entire without much difficulty. A new ramus had already commenced forming.

MESENTERIC HERNIA.

Dr. MASON presented a specimen of mesenteric hernia which was taken from a dissecting-room subject. The sigmoid flexure of the colon and greater portion of descending colon had been forced through an opening in the mesentery, and was actually in a state of gangrene.

Dr. SMITH remarked that he had presented a somewhat similar specimen, in which almost the entire small intestine had become strangulated, and in consequence of the latter condition, the capillaries of the part had ruptured, accounting for the rapid death of the patient.

Dr. POST referred to the case of a child who had died many years ago with symptoms of strangulated hernia. On making the post-mortem examination he found five feet of small intestine, strangulated through an opening

formed by an adventitious band which was attached to the mesentery. The first symptoms which preceded death were those which attended strangulation by a peanut shell, but these were afterwards marked by the abdominal symptoms soon after ushered in. The adventitious band seemed to contain in its centre a piece of the fin of a fish which had previously been swallowed, and after having ulcerated its way through the intestine became inclosed in fibrinous exudation.

Dr. SANDS related the following remarkable instance of hernia. A little more than a year ago, he went a few miles out of town to see a gentleman suffering from the rational signs of hernia. The history was one of original hernia of the right side. The hernia had been a reducible one, but had not descended in several years. The symptoms at the time were: obstinate constipation, vomiting, some tumefaction of the abdomen, together with signs of great prostration. After a careful examination of the case, he felt so confident that no hernia existed that he dismissed from his mind even the probability of such an occurrence. The man died on the same day. On making the autopsy it was found that death was after all caused by a hernia, but by such a one as could not possibly have been recognised during life. The lesion was upon the right side. Only a small segment of the small intestine was constricted, and was occasioned by the gut slipping behind the peritoneal fascia and between it and the rectal muscle, forming there a complete pocket, the constricted portion of which was formed by a band of false membrane. This strangulation was sufficient to obstruct the fæces but not enough to cause gangrene.

He also referred to a second case of masked hernia, which was also diagnosticated only at the autopsy. The patient was a lady, who after being out riding, suddenly died of prostration. In that case there was femoral hernia of the left side, but no external signs of its existence could be ascertained, either by palpation or percussion. The difficulty in making a diagnosis could be accounted for by the existence of two inches of fat over the part.

Dr. WOOD alluded to a case of hernia which had come under his observation, and in which the sac was formed by the sheath of the psoas muscle. The gut was not mortified, although it was evident that the strangulation had existed for some little time. In this connexion he remarked, that his experience led him to believe that in those cases of internal hernia where the mesentery was involved or the intestine entangled with old adhesions, gangrene of the incarcerated tissues did not take place.

Dr. SANDS was of the opinion that the cause of the accident in the first case reported by him, was due to an abuse of the truss.

MENINGEAL APOPLEXY IN NEW-BORN INFANT.

Dr. LEWIS SMITH presented a specimen of meningeal apoplexy in a new-born infant. The mother of the child had symptoms in the latter part of gestation, which weres upposed to threaten uræmic convulsions. She had pretty persistent headache as well as albuminuria. The physicians who were visiting her were contemplating the propriety of inducing premature labor, when the labor pains set in, and a fœtus of eight months was expelled. The child presented by the breech. The first stage lasted about six hours, and passed off in the usual manner without any untoward symptom. The second stage was much shorter, being hastened by manipulation.

The infant at first seemed to be doing well, but after a time attention was directed to its respiration. It became labored and embarrassed, and was decidedly stertorous in character.

On making the post-mortem examination, the abdominal organs were found healthy. The heart also seemed to be in its normal state. The superior and middle portion of the right lung was inflated, with the exception of a dark red portion. The posterior lobes on both sides had apparently not been inflated, were of a still darker red, and were non-crepitant.

The lesion of chief interest was found in the cranial cavity. On removing the cranial bones, we found an effusion of blood extending up upon the vertex so as to cover the two posterior cerebral lobes, over the posterior surface of the brain, and under the cerebellum. In this latter situation a thick clot was discovered, communicating with an opening in the meningeal artery.

Dr. SMITH stated that he had seen a similar condition of things in two other cases. In both, however, the labor was much protracted, in one forceps being used.

ANEURISM OF AORTA.

Dr. NEWMAN presented a specimen of aneurism of the aorta, which was removed from a young man, twenty-seven years of age, who returned home from his office with headache and died almost immediately after, before the arrival of the physician. It seems that the patient had been treated eighteen months ago for epilepsy, but had recovered from his more frequent attacks, being left with a numbness of his left arm. There were no other symptoms noticed during life that would lead to the suspicion of any serious trouble.

The post-mortem was made fourteen hours after death. The pericardium was found filled with liquid blood which had escaped through a small opening in the posterior part of the aorta. The heart was entirely empty. Nothing aside from a turgidity of the cerebral vessels and a blueness of the dura mater was noticed as the result of an examination of the cranial cavity.

Dr. NEWMAN alluded in connexion with his specimen to the preservative power of carbolic acid, which was in the proportion of 3 iss to a pint of water.

Dr. JACOBI was surprised to find that so small an aneurism had ruptured when the arterial coats were so thick, and the atheromatous deposit was only in its first stage.

Dr. POST exhibited a specimen of fibro-celullar tumor the size of a pullet's egg, which he removed three weeks ago from the upper lip of a man in New Jersey. It had developed between the skin and mucous membrane, and was of seven years' standing. Being attached to the mucous membrane, that portion of the mass was removed by an elliptical incision, the whole lip being cut through as in the operation for hare-lip. The tumor was examined microscopically by Dr. W. B. Lewis.

Dr. ROGERS, after asking several questions in regard to Dr. Hamilton's case, which are however noted in the history, stated that the absence of excessive pain was a very remarkable feature. In all those cases which he had read or heard of, the very opposite condition of things existed.

Dr. HAMILTON remarked that such a circumstance formed one of the most interesting points in the history.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

STATED MEETING, APRIL 1, 1867.

DR. SAMUEL T. HUBBARD, PRESIDENT, in the Chair.

THE PRESIDENT announced that the Comitia Minora had voted to grant certificates of membership to Drs. Alphonso D. Rockwell, Governeur Mather Smith, John

C. Peters, Edward Sheil Finlay, John Phillips Payson White, and Wm. W. Strew.

DISEASES OF THE MONTH.

Dr. Dunster, from the Committee on Diseases, reported the total mortality for the four weeks ending March 23, at 1,621, or 98 less than for the previous four weeks. The causes of death were distributed as follows: Zymotic diseases—305; scarlatina still holding the lead, though rather declining; diphtheria slightly increased; croup diminished nearly one-half; typhus and typhoid unchanged. Constitutional diseases, 430—the tubercular continuing to claim special attention, there being 243 deaths from phthisis, 70 from tabes mesenterica, and 45 from hydrocephalus. Local diseases, 642—of which pneumonia gave 124 cases, and bronchitis 28. Developmental diseases, 134. Violence, 49. There was still an immense preponderance of deaths among the young, 468 occurring under one year of age; and nearly one-half the whole number under five years. Thirty-three persons had died above the age of eighty. The diminution of the aggregate mortality was attributed in part to the favorable atmospheric conditions, as shown by the report of the meteorological committee, and in part to the prompt and efficient action of the health authorities in preventing the spread of contagious diseases.

The President announced the death, since the last meeting, of Dr. Alvan Hyde Turner, a member of the Society since 1862.

ALCOHOL: ITS EFFECTS UPON THE PUBLIC HEALTH.

Dr. Wm. F. Thoms read a paper upon "The Effects of the Habitual Use of Alcoholic Liquors on the Public Health." After an historical introduction, he said that the ratio of deaths from alcoholic poisoning in the city of New York is one to every 4,070 of the population per annum. This, at the usual rate of 28 sick to one death, would give to the whole city one sick from the effects of alcohol to every 145 of the population. In the lower wards of the city there is at least one drunkard to every 50 of the population, and the sickness from this cause is very great. In the various dispensaries and missions with which he is connected, at least one-half of all the cases of sickness that come for treatment are caused directly or indirectly by the effects of alcoholic liquors. The ratio of sickness from this cause in the country is 1 in 750. In London the ratio of deaths from this cause is 1 in 12,800, and the sickness rate 1 in 466. The mortality is less in London than in New York, because the liquor chiefly used in the former city is gin, which, acting on the kidneys, produces a less injurious effect than the other alcoholic preparations. The number of deaths in London has risen and fallen according to the facilities granted for manufacturing, vending, and purchasing alcoholic liquors. Whenever the government, to satisfy distillers and venders, opened the floodgates and suffered them to pour out the poison upon the community, then the bills of mortality invariably rose. When the evil became too great to be borne and the government laid on heavy duties, checked importation and hedged in the traffic, then the mortality was lessened. In the whole of England the death-rate from this cause is 1 in 26,000, and the sickness rate 1 in 860, varying according to the facilities for obtaining alcoholic liquors. Their introduction into general use imparted increased virulence to the character of many diseases; and even new diseases began to make their appearance from this source. The consequences of liquor-drinking were so serious in England in 1725 as to cause the College of Physicians to make public representation of them; and in 1750, when the habit was so general, the same body stated they had 14,000 gin cases under their care, most of which baffled all their skill in medicine.

Among the European regiments in India, according to late information, there was, daily, 1 in every 9.8 intemperate men admitted to the hospital, while of the temperate class of soldiers there was only 1 in 27.1. The death-rate for the year 1865, among the same troops, was 1 in 16.4 temperate; 1 in 7.2 intemperate.

Life insurance companies will not issue policies to those whose habits are known to be intemperate; and if it be discovered after death that a policy has been obtained by the concealment of such habits, it is forfeited.

From Neison's "Vital Statistics" it appears that the intemperate have a greatly increased mortality from diseases of the head and of the digestive organs (especially the liver), while they suffer less than others from respiratory diseases. The following table shows the ratio of deaths from these causes to those from all causes in the temperate and the intemperate respectively:

From diseases of the	*Temperate.*	*Intemperate.*
Head,	1 death in 104 deaths.	1 death in 36 deaths.
Digestive organs (esp. liver)	1 " " 160 "	1 " " 42 "
Respiratory organs	1 " " 80 "	1 " " 43 "
From all the classes combined	1 " " 20 "	10 " " 13 "

The mortality of the intemperate at from 21 to 30 years of age is five times that of the temperate; at from 30 to 40, four times.

The following table shows the comparative chances of longevity with temperate and intemperate persons:

A temperate person's chance of living is:	An intemperate person's chance of living is:
At 20, 44 years longer.	At 20, 15 years longer.
At 30, 36 years longer.	At 30, 13 years longer.
At 40, 28 years longer.	At 40, 11 years longer.
At 50, 21 years longer.	At 50, 10 years longer.
At 60, 14 years longer.	At 60, 9 years longer.

The average duration of life after the commencement of the habits of intemperance is, among mechanics and laboring men, 18 years; among shop-keepers and merchants, 17 years; among professional men and gentlemen, 15 years; among females, 14 years.

With reference to the effects of alcohol in cholera, the paper recited that all experience, both in this country and in Europe, has proved that those who have been addicted to drinking alcoholic liquors, have been the greatest sufferers from that epidemic. In confirmation of this statement, a diagram was displayed showing the relation of the number of deaths from cholera and from all causes to the number of liquor-stores, in the several wards of this city, during the last season. From the numerous authorities quoted in support of the position, we give brief extracts. Dr. Sewall, of Washington, while on a visit to the cholera hospitals in this city, in 1832, writes thus: "Of 204 cases of cholera in the Park Hospital, there were only six temperate persons, and they recovered speedily, while 122 of the others, persons of intemperate habits (when he wrote), had died. Similar experiences," adds the Doctor, "meet us in every other hospital." "At Albany," states Dr. Mussey, "during the same season, cholera prevailed for several weeks, attended with a severe mortality; and it is a remarkable fact that, during its whole period, it is not known that more than two individuals out of the 5,000 members of the temperance societies in that city became its victims." Mr. Huber, who saw 2,160 perish in 25 days, in one town in Russia, says: "It is a most remarkable circumstance, that persons given to drinking have been swept away like flies. In Tiflis,

containing 20,000 inhabitants, every drunkard has fallen; all are dead; not one remains."

The Doctor then dwelt at considerable length upon the injurious effects of intoxicating liquors upon persons suffering from fever, quoting from the works of eminent physicians to support his arguments. Not only is this the case in cholera and fever, but in almost every variety of disease that afflicts mankind. In conclusion of this part of the subject, he gave as the results of his observations in regard to the effects of alcoholic liquors on the human system: First, they destroy the healthy relations of the system; second, they diminish and finally destroy the vital powers; third, they act injuriously on the human system in preventing the organs of restoration from performing their functions in a healthy manner; fourth, they prevent the effectual separation of old and useless matter, and also prevent the new matter from possessing that healthy nature essential to proper restoration; fifth, they have a deteriorating influence in respect of the physical energies of the present generation at large.

Some curious computations were then given, by which,—counting a man's time worth one dollar per day, and 313 working days in the year,—it was calculated that the State of New York loses annually, from the habitual use of alcohol, the sum of $16,257,920.

The paper was accepted.

Dr. Chadsey thought it impossible to get a correct return of the deaths from alcohol in this city. With reference to persons of the Roman Catholic faith, a return of their deaths from its use would prevent their burial in consecrated ground; and he believed it customary in such cases to suppress this as a direct or predisposing cause of death.

Dr. John O. Stone, while recognising the value of the paper as presenting matter for careful thought, doubted the accuracy of some of its statistics and the calculations based upon them. Especially in regard to the effects of regular moderate drinking, upon which the gentleman had enlarged, he thought it would be impossible to obtain facts that should be trustworthy. He was surprised, also, at the conclusions drawn from the comparison of the death-rate in the various wards with their number of drinking-houses. Such methods would open the way to grave error. It is true that the liquor-shops are most numerous in the poorer districts, and that these also furnish the heaviest mortality-bills. But here a multitude of causes combine to increase the rate of sickness and death. And it is not even certain that more liquor is consumed here than in the richer and healthier districts. For while the poor frequent the dram-shops, and rarely take much liquor to their cabins, the rich supply themselves in quantity, and have the means of indulgence constantly at hand. He believed that if there was any salvation for the wretched dwellers in our ill-drained, ill-ventilated tenement-houses, it was a glass of whiskey. The great difficulty was, they expended so much money for whiskey, that they had not enough left for food. Put the same persons under better hygienic conditions, and let them drink as much as at present, and they would probably not be harmed by it. We see constantly, among the wealthy, those who use alcohol habitually without injury. He had been surprised at the great longevity of this class in England, where it is well known they are wont to indulge in free drinking. The evils of intoxication were recognised by all, and he only objected to taking a magnified view of them.

Dr. Thoms replied that for his statistics in regard to the longevity of moderate as well as other drinkers, his authority was Neison. In regard to the ratio of deaths to the number of liquor-stores, he had simply given the facts, without attempting to frame a theory.

Dr. Bibbins said that if the gentleman's figures would frighten any one into habits of temperance he should be glad of it; but he could not reconcile them with the statistics of returns from the British custom-houses, lately presented to a committee of the House of Commons having under consideration the subject of taxation for raising revenue. (The tables had been published in the *Tribune*.). From these it appeared that tax imported liquors as you might, it affected scarcely at all the amount consumed. Cost what they would, the people would have them. This was in direct conflict with the statements of the paper just read concerning the fluctuations in the consumption of alcoholic drinks in England, as dependent upon government taxation. Where should we look for reliable figures upon the question, if not to the custom-house records. and the finance committee of the House of Commons? He would have the Society, as a scientific body, pause before committing itself to conclusions opposed by such authority.

Dr. Peaslee could not harmonize Dr. Bibbins's statement with any principle of political economy. He could easily see how a heavy duty upon spirits might not diminish the revenue, for the rich would still consume as much as before; but that it should not diminish the consumption he could not help doubting, for the poor would be inevitably deprived of their wonted amount. He continued, that at this day, when the war had so greatly increased the use of stimulants; when chemists were assuming, but without a particle of physiological proof, that alcohol could take the place of food, by checking waste of tissue; and when learned theologians were ranging themselves upon the same side, he thought it required a good deal of moral courage to take a stand on the ground of temperance. He was disposed to accept the argument of the paper as essentially sound, and its conclusions as generally true, and not to cavil at any slight errors in its details. His extensive observation had taught him that to both young and old the excessive use of ardent spirits was only harmful. The question of their moderate use was more troublesome; but, according to his experience, a young man of twenty who drinks moderately to-day, will drink excessively twenty or thirty years hence; though if the habit of habitual drinking be not formed until the age of forty-five or fifty, it may very likely be continued in moderation to the close of life. He would not interfere with any man's private practices; but thought it the duty of physicians, in their professional capacity, to avoid carelessly inducing or fostering habits of intemperance in the young.

Dr. Bibbins responded that, if he mistook not, the committee above named had gone into calculations to show how the poor man, by economizing in other ways, managed still to get his usual allowance of liquor in spite of the government duty.

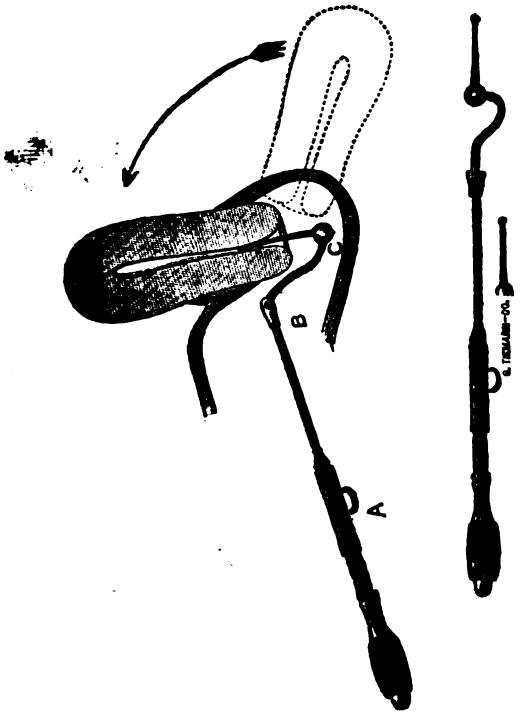
The Extravagance of Allowing Bodies to Decay.—Some of the French utilitarianists propose to put the corpses which are now allowed to rot and waste away in our graveyards, to some more useful purposes, viz.—that of making an illuminating gas. They estimate that a medium-sized adult, by a process of combustion in retorts, is capable of making an amount of gas valued at about eight francs, and large sized corpses in proportion. Verily we live in a practical age.

A Case of Longevity.—Jacob Near, of Webster, Monroe county, N. Y., died on the 28th ult., aged 110 years. He retained, until about a month ago, to a remarkable degree, his intellectual faculties.

New Instruments.

EMMET'S MODIFICATION OF SIMS'S UTERINE ELEVATOR.

Some years ago, Dr. Sims published in the *American Journal of the Medical Sciences*, Philadelphia, an account of a uterine elevator devised by him. It was an ingenious instrument, and replaced a retroverted uterus with great facility; but it was impossible in most cases to withdraw it from the uterine canal, without again retroverting the organ to a great extent. Dr. Emmet has lately modified the instrument with a view of overcoming this difficulty. The patient is placed on the left side (or better, on the knees and elbows if the vagina is small), and Sims's speculum introduced as far as an ordinary vaginal examination. In the latter position, if the operator is without an assistant, he can readily hold the speculum in the left hand and use the elevator with the right, for atmospheric pressure will fully dilate the vagina if the clothing of the patient has been previously loosened about the waist. The stem portion of the instrument is forced into the uterine canal, and by gentle pressure backwards into the *cul-de-sac*, the fundus is lifted into place or anteverted at pleasure. From the ring on the slide at A, a stilet



passes through the instrument beyond the joint at B. By drawing the slide back, the joint B is freed, and on making pressure upwards and backwards against the base of the bladder in front of the uterus, the organ is prevented from turning over again, while at the same time the stem is pushed out of the canal. This instrument has an advantage in the fact that the only point of pressure made is at the os by the bulb C, without the risk of lacerating the lining membrane of the canal as when the sound is used, or any other instrument lifting the organ by its extremities alone. The intra-uterine portion should be of several lengths, and the one used ought always to be about half an inch shorter than the canal. It is screwed into the bulb at C, and being made of copper, it can be bent in conformity to the curve of the canal, if a flexure exists. The instrument has also the advantage that with its use adhesions can be readily detected, with a perfect appreciation on the part of the operator as to the actual amount of force he is exerting.

Correspondence.

FOUR CHILDREN AT ONE BIRTH,

AVERAGING FIVE POUNDS EACH; ALL LIVING AND WELL, AND NURSING THE MOTHER.

To the Editor of the Medical Record.

Sir—Some few weeks ago, the following letter was received from a graduate of the New York University, dated Taylor's Turn-Out, S. C., March 7, requesting any remarks which I might think proper to make, in reference to the interesting case which he details. Accordingly, after reading the case, I thought it of sufficient importance to the readers of your journal to give it in full, as presented by Dr. Faust. I have also taken the liberty of adding my comments upon the same.

I am, sir, very truly,
Gunning S. Bedford, M.D.

Graham's Turn-Out, S. C.,
March 7, 1867.

Prof. G. S. Bedford, 66 Fifth Avenue, New York:

My Dear Doctor:—I have just visited a lady who has been delivered of four healthy male children at one birth. One of the children was born on the 26th of last February, at 11 o'clock A.M., the other three were born on the following day (the 27th), between the hours of 6 and 8 o'clock A.M. There was but one placenta, which was square; cord attached to each corner. The mother is just 25 years of age, and is doing well. All the children nurse the mother, and will average 5 lbs. each in weight.

Thinking, perhaps, that you had not seen such a case recently, and especially where all the children were living and doing well, I deemed it my duty, as an old student of yours, to inform you of the fact, as obstetrics was always your favorite branch. Please let me know what you think of such cases, and how often they occur.

I remain, yours very truly,
C. J. Faust, M.D.

Reply.

66 Fifth Avenue, New York,
March 20th, 1867.

My Dear Doctor:—Your very kind letter of 7th instant I received with much interest. The case of quadruple birth which you describe is, indeed, a remarkable one. You ask me "what I think of such cases, and how often they occur?" Well, I tell you very frankly, that *four* children at one birth, and all "living, and doing well," may be regarded as among the extremely rare phenomena of the lying-in room. I myself have never met with an instance of such fecundity—the richest reproductive result in my practice being once, an example of triplets, two of the infants, with the mother, surviving; the third was still-born. It has been my fortune to bring 33 twins into the world, one of which cases I will briefly mention, as illustrating the fact that the procreation of twins seems to be peculiar to certain individuals and families. Some years ago I attended a lady in child-bed with twins. This lady I confined three times successively with twins. She married a

German gentleman. Her husband was a twin, and his aunt on the maternal side I delivered twice consecutively of two children at each birth.

It would seem that a twin pregnancy occurs in the varying proportion of one in sixty to one in ninety-five cases. Madame La Chapelle records, that in 37,441 births there were 36,992 single deliveries, 444 instances of twins, and but five cases of triplets; and it is an interesting fact that in 108,000 births in the Hotel Dieu, and Maternité of Paris, from the years 1761 to 1826, *there was not one example of quadruple gestation.* In 129,172 deliveries in the lying-in-hospital of Dublin, there were 2,062 cases of twins; 29 of triplets; and but *one instance of a quadruple birth.* Haller (Physiologia, 929), observes, "*non raro femina geminos fœtus parit; rarius paulo tres, neque unquam supra quinque.*

Among British practitioners, in 257,935 births, according to Dr. Churchill, there were 343 cases of twins, or about 1 in 75, and 43 cases of triplets, or 1 in 5,561‡; among the French, in 39,409, there were 336 cases of twins, or 1 in 108, and 67 triplets, or 1 in 6,568; among the Germans, in 369,080, there were 4,239 cases of twins, or 1 in 87, and 38 of triplets, or 1 in 9,765. Taking the whole, we have 666,424 cases, and 8,006 of twins, or 1 in 83, and 87 cases of triplets, or 1 in 7,443.

The following is presented as the rate of mortality: In 1,298 cases of twins (*i.e.* 2,696 children), 636 were lost, or about 1 in 4; and of 12 instances of triplets (*i.e.* 36 children), 11 were lost, or 1 in 3. The mortality to the mother in twin cases has been computed as 1 in 20.

The general rule is that, in plural pregnancy, each fœtus possesses its own membranes and placenta; and, in this particular, it simulates a single gestation, with the exception that sometimes there will be an inosculation of blood-vessels between the different placentæ. On the other hand, it will occasionally, though rarely, happen that there is but one after-birth for the two children; and it has been suggested by Dr. Tyler Smith, that, in these latter instances, the one ovule has contained two yelks, and two germinal vesicles, as is sometimes observed in the case of birds—one egg with a double yelk producing two individuals. The fœtuses in plural pregnancy are usually smaller than when there is but one child *in utero*, and there is, also, a strong predisposition to premature delivery. When there are more than two, the expulsion is still more apt to be premature, and the children rarely survive beyond a short time. It must, however, be admitted that there are well authenticated exceptional examples of the reverse of this latter rule. Dr. Collins cites, within his own knowledge, two instances of *triplets* having arrived at the full period of utero-gestation, and were reared healthy children.

In the great majority of cases in twin-births, statistics show that the second child is delivered, by the resources of nature alone, from fifteen to thirty minutes after the birth of the first. In 212 instances recorded by Dr. Collins, in which the interval is accurately marked, in 38, it was five minutes; in 29, ten minutes; in 48, fifteen minutes; in 23, twenty minutes; in 30, half an hour; in 5, three-quarters of an hour; in 16, one hour; in 8, two hours; in 3, three hours; in 2, six hours; in 1, seven hours; in 1, eight hours; in 1, ten hours; in 1, twenty-four hours.*

In plural pregnancy, it will occasionally happen that one fœtus is healthy, and perfectly developed, while the other bears evidences of an early arrest in its growth, and may be either living or dead. This fact is very satisfactory proof that the lives of the two children are quite independent one of the other.* Again, both children may be fully developed, and alive, but one much larger than the other. Cases, such as I have just mentioned, may very naturally give rise to the idea of *super-fœtation*, and have been attempted to be explained by some writers exclusively upon this hypothesis; but *super-fœtation*, in my judgment, is not at all necessary for the elucidation of the phenomena—they may exist independently of any such influence. For example: this inequality may be due either to some original defect in one placenta or funis, or in one of the fœtuses; or it may result from compression exercised in utero by one child on the other. There can be no doubt of the occasional operation of either of these influences.

A plural pregnancy does not necessarily imply that the labor will not be natural; on the contrary, nature, unless there should be some complication, such as malposition of the fœtuses, will be adequate to accomplish the delivery, through her own unaided resources. The labor, however, as a general rule, will be more protracted, because the uterus, having been subjected to a greater degree of distension, loses in proportion its contractile tonicity, and therefore a longer period is needed for the achievement of the process. And, also, when there is more than one fœtus in utero, the organ cannot concentrate its power as in a single gestation.

The following table, exhibiting presentations of the fœtus in 808 labors with twin children, has been constructed by Prof. Simpson† from the returns of twin-births, as observed in the Dublin and Edinburgh Lying-in Hospitals, and among the patients of the London Maternal Charity:

Reporter.	Total number of Cases.	Number of Head Presentations.	Number of Pelvic Presentations.	Number of Transverse Presentations.
Clarke	126	78	58	..
Collins	449	309	133	7
Hardy and McClintock	190	122	62	6
Ramsbotham	772	532	221	19
Simpson	80	23	7	..
Reid	48	25	22	1
Total	1,615	1,084	498	33
Proportions among twin children		67 in 100	1 in 3	1 in 49‡
Proportions among all births		96 in 100	1 in 81	1 in 224

And now, my dear Doctor, I must close this letter, trusting that it will not be altogether without interest to you. You certainly have accomplished something to be proud of; and I am much pleased that you have added to your little State of South Carolina *four males.*

Believe me to be, most truly yours,

GUNNING S. BEDFORD, M.D.

C. J. FAUST, M.D.

DEATH FROM CHLOROFORM.—A stableman recently died under the influence of chloroform at Saint Mary's Hospital, London. It was administered to facilitate the reduction of dislocation of the thumb.

* Dr. Merriman cites the following case, reported in the *Medical and Physical Journal* for April, 1811, vol. xxv., p. 311. In an instance of twins, the second child was retained for fourteen days after the birth of the first, and the writer remarks that another example had come to his knowledge in which six weeks had elapsed between the expulsion of the twins.—*Merriman on Difficult Parturition.*

* There is no difficulty in accumulating proof of the independence of the two fœtal lives; but the following is certainly a most interesting demonstration of the fact: A pregnant woman was attacked with small-pox, and recovered. She was soon afterwards delivered of twins, the one having received the small-pox in utero, the other not. The case has been reported in the *Journal de Médecine*, edited by Vandermerde.

† Simpson's Obstetric Works, Vol. II., p. 183.

‡ The same tendency to malpresentation also exists in the case of triplets.

TURKISH AND RUSSIAN BATHS.

To the Editor of the Medical Record.

Sir—In these days, when the laws of hygiene are beginning to receive the attention which they deserve, and when their capabilities for diminishing the number and severity of cases of preventable disease are recognised facts, an appeal for the more widely extended use of the only thorough methods of bathing may contribute to the general good.

I advocate the Turkish and Russian baths for those who have no organic or functional diseases to contraindicate their use.

Many physicians are personally familiar with their benefits; many more recommend them in special cases, and approve of their use by those desirous of making a trial of them. But very many know nothing personally of the subject, and hesitate to recommend them, even to healthy persons interested in these baths from curiosity, or for other reasons. Others are influenced by the reports made by patients who have bathed once or twice, and perhaps then imperfectly or injudiciously.

The whole question is yet in the germ of practical utility; but my convictions and my personal experience leave no doubt in my mind of its inherent vitality, and of its ultimate development into another of our national institutions.

The American people display tendencies to dyspeptic conditions; to sluggish skins, prematurely yellow and wrinkled. They are distinguished for their inordinate mental activity, and for the display of an energy in their various occupations which leads them to sacrifice repose, and many hygienic influences, more appreciated in other countries. We inhabit a country with a dry climate influencing most markedly, the evaporations from the skin, and stimulating us to activity. We suffer from the most marked varieties of temperature. We swelter in the summer, and we shiver in the winter. The ethereal mildness of the balmy spring is received by us on the authority of the English poets, and there remains only the glory of our American autumn as a subject of just national climatic pride and congratulation.

All unfavorable influences of climate and national habits combine to suggest the more extended use of the Turkish and Russian baths as a national need; and surely, if slowly, will their hygienic, their soothing, their invigorating influences, commend themselves to our overworked, harassed, and sedentary population.

The American people have purged themselves too long and too often of their "peccant humors" through the bowels. Some emunctory must be opened for our relief; some safety-valve must be contrived for our high-pressure lives; and the intestinal mucous tract has been spurred and forced to perform much of that duty which nature has assigned to the healthy skin.

Is it probable that the frequenters of the Roman baths would have displayed as many post-mortem evidences of renal disease as the great unwashed and sedentary populations of our times? Do we not all force the skin to renewed activity when its yoke-fellow, the kidney, is struggling with disease? Is it not certain that a more thorough and systematic attention to the functions of the skin would prevent many of the diseased conditions of the kidney, so widely spread, that healthy kidneys are rarely met with in autopsies and dissecting-rooms?

Many cases of dyspepsia are susceptible of relief in this way. That these baths facilitate digestion was known of old, and the manner in which they were used for the relief of gormandizers has been made one of the topics of Juvenal's satire. For the relief of rheumatic pains, and as a prophylaxis of rheumatism, there can be no question as to their value. They are better worth than drugs and ointments for many cutaneous diseases. For psoriasis—an opprobrium medicorum—they fulfil the chief indication. The cure of scabies can be hastened by their use, and the risks of tegumentary irritation from the prolonged use of sulphur obviated.

The dark ages were the dirty ages; and with all the development of learning, the wonderful contrivances of printing, postage, and the telegraph, for disseminating and transmitting information; with all the luxuries of dress and home-comforts that mark the civilization of our day; with the expenditures for water supply, and the priceless treasures of our Croton, we are not as clean in our persons now as the old Romans were.

Urquhart, and others, are enthusiastic regarding the applicability of these baths to the cure of tuberculosis; and when one remembers the benefits claimed for these patients, when they pass hours in the sugar-boiling houses on the plantations, it is evident that if any remedial agents were to be found there, the chief must have been heat and moisture.

These baths should be attached to our hospitals, where the existing necessities for large boilers would permit their introduction at a moderate outlay. They should be afforded at a low rate to the packed masses of our tenement-house population.

Cleanliness is next to godliness; and cleanliness can be attained so thoroughly by no other method, as those well know who have taken these baths often enough to have their scarf-skin peeled off, and witness the difference in the rapidity and amount of their perspiration, after the skin has attained to something like a condition of health and freedom in its action. Sir Francis Head reports a Frenchman to have said, after taking the baths at Schlangenbad, "On y devient amoureux de soi-même." At least, one may learn to entertain a proper respect and appreciation for his own skin after these baths have instructed him in its capabilities.

Try them for yourselves, all those who have healthy hearts and sound arteries; but try them frequently enough to know by experience their capabilities for improving your health and adding to the comfort of your life. And though you avoid the *gravida sus* of Juvenal, be sure not to neglect to take a lunch before you go. For my own part, I prefer the baths of Dr. Gutman, in Fourth street, between Lafayette place and Fourth avenue, where they can be taken in combination, and where one can pass directly from the enjoyment of the Turkish to that of the Russian bath. "But let every one be persuaded in his own mind."

Yours respectfully,

Geo. T. Elliot, Jr.

12 West Twenty-ninth street.

PUBIC VERSION IN UTERO—THE WOMAN PLACED ON HER KNEES AND CHEST.

To the Editor of the Medical Record.

In an article, published in the Medical Record, August 15, 1866, I remarked that pubic version, in my opinion, could be performed much easier were the woman placed on her knees and chest than by the usual method. I do not refer now to the operation by external manipulation, but only to one where the hand is required to be introduced into the uterine cavity.

Since the publication of that article I have attended three cases of confinement, wherein pubic version was required, and could not be performed by external manipulation in consequence of the bodies of the children being impacted, and have done the operation according to the above plan with eminent success.

Case I.—Was a Mrs. N——, twenty-eight years of

age, in her fourth confinement. When I reached her bed-side I ascertained that she had been in labor several hours, and that her pains had been very strong. I examined her, and found the umbilical cord presenting, prolapsed about twelve inches, cold and feebly pulsating; also the body of the child lying transversely, considerably impacted. I placed the woman in the position above described; administered chloroform; returned the cord by Dr. T. G. Thomas's method, and without withdrawing my hand, or changing the woman's position, seized the foot, and turned and delivered the child in a few moments' time, successfully, alive and uninjured.

Case II.—A Mrs. D——, aged thirty-five, in her eighth confinement. This case was similar to that of Mrs. N——, excepting the funis was not prolapsed; the side of the child presenting. I arranged her in the same position, and operated in the same manner, without administering chloroform, with like success. Anæsthesia was not resorted to in consequence of her preference to suffer.

Case III.—A Mrs. B——, in her fifth confinement, aged thirty. In this case the shoulder was presenting, and so impacted that it was difficult to distinguish it from a breech-presentation. On being satisfied that it was not breech, I placed her in the position required by the method, administered chloroform, and performed the operation with the same success as related in the other cases. Mother and child doing well as the above.

The position of the women in these three instances I am thoroughly convinced rendered operations very easy, which otherwise would have been very difficult.

The advantages gained over the usual method by thus operating are obvious to any practical obstetrician.

The first is, the relaxation of vaginal sphincter and walls; the second, the gravitation of uterine contents relieving impaction; the third, the retaining of the amniotic fluid during the operation; the fourth, the hand and arm may be introduced into the uterine cavity more nearly in a line of the axis of the superior strait, the cervix and perineum being yielding.

Alex. Hadden, M.D.

Obituary.

CASPAR WISTAR, M.D.,

OF PHILADELPHIA.

The death of this excellent man will be a source of deep and unalloyed regret to all who knew him, for his qualities of mind and heart were such as secured for him the love and respect not only of a large family circle, but also of a very extensive general acquaintance. Indeed, no one could approach him without being favorably impressed by his frank, open manners, and his kind, earnest, genial, and sympathizing disposition. The son of the late venerable Thomas Wistar, and the nephew of the eminent anatomist and surgeon whose name he bore, he naturally inclined to the adoption of a profession which had been so signally illustrated in his family; and accordingly, after the decease of his distinguished relation, he entered the office of the late Joseph Parrish, under whose instructions and those of his associate, Dr. Wood, he prepared himself for the degree of Doctor of Medicine, which was conferred on him in the year 1824. Immediately after his graduation in the medical department of the University of Pennsylvania, he was elected to the office of Resident Physician of the Pennsylvania Hospital; where for the space of two years, he enjoyed advantages for the acquisition of practical medical knowledge such as at that time were to be found nowhere else in our country. Thus qualified for the successful pursuit of his profession, possessing excellent natural endowments, having the certain support of a numerous connexion, the patronage of a wealthy and estimable body of Christians—which then bore a much greater relation in proportion to the population of the city than it now does, though it has in no degree declined from its former influence and respectability—as well as the prestige of a beloved and celebrated name, he might have confidently anticipated a lucrative practice, and the attainment of the highest medical honors and position. The path of professional life, rugged and difficult to others, had been made smooth and easy to him; but whether owing to increasing domestic responsibilities, aversion to the steady, laborious, and exclusive application which is imperatively required to reach a foremost place in medicine, as indeed in all other branches of knowledge, an unwillingness longer to subject a nervous and impetuous temperament to the harassing toils and mental disquietudes inseparable from the life of a physician, or to some other cause unknown to the writer, he soon began to relax his exertions; and after a few years of successful practice, during which he abundantly demonstrated how much more he could have accomplished, he retired from the field, and devoted himself henceforth almost exclusively to the duties of private life, and the promotion of objects of general benevolence and utility. It was in occupations such as these that he appeared in all the beauty and attractiveness of his character. He was always ready to take a part in every enterprise having for its object the alleviation of the miseries and the cultivation of the charities of human life; and many of our public institutions are greatly indebted to him for his active interest and fostering care. The Philadelphia Dispensary especially owes more to him than perhaps to any other person; for throughout the long period of forty years, during which he held the positions of Secretary and President of that admirable charity, its management, of necessity, devolved chiefly upon him; he continued to watch over its welfare with unflagging zeal to the day of his death; and its past usefulness and present prosperity bear testimony to the wise economy and prudence with which its affairs have been administered. The limited space to which this notice is restricted would hardly suffice for the bare enumeration of a tithe of what he effected in almost every department of philanthropic effort. He was a prominent member of the Society of Friends, and with the active benevolence for which that body of Christians is so honorably distinguished, his whole life was devoted to the promotion, in some way, of the welfare of others. A large share of his attention was directed to the improvement, in every mode, of the colored population of the city; and for several years he acted as physician to the Home for Colored Children. His sympathies were ever most deeply moved by fallen man in his most helpless and degraded state; and hence the lively solicitude he evinced for the well-being of the inmates of our prisons, houses of refuge, and other reformatory institutions, in the direction of which he bore an important and conspicuous part. The subject of slavery early engrossed his thoughts; and while his voice was ever heard in indignant condemnation of that barbarous system, his feeling heart and energetic mind were constantly employed in the furtherance of measures for its adoption. To this end he thought, spoke, and wrote with unwearied diligence. As a means of extending his usefulness, and influencing the minds of others beyond the sphere of his personal acquaintance, he assisted at one period in the editorial supervision of

"The Friend," a weekly publication belonging to his Society, and was at all times a frequent and valued contributor to its columns. He was, of course, opposed to the war—in which, however, one of his numerous family, General Isaac J. Wistar, who was badly wounded in the battle in which the lamented Colonel Baker fell, bore a prominent share—but he foresaw at least one good result of the murderous and unnatural strife, in the overthrow of African bondage. His nature was ardent, his perceptions quick, and his acute and ready mind possessed the faculty of fixing almost intuitively on the strong points of any subject submitted to its consideration. His friendships and attachments were strong and unwavering; his address warm and cordial; his conversation interesting and instructive, abounding in anecdote and illustration; he was fond of humor, prompt in repartee, and was a person whom it was always a happiness to meet, and from whose presence one rarely departed without pleasure and improvement. Such, in very brief and imperfect outline, is the character of Dr. Wistar, as it appeared to your correspondent; but it would be incomplete indeed, if it failed to convey the impression that he was an humble and consistent follower of the Divine Redeemer. The true Christian was regarded by our departed friend as the highest style of man; and though conscious of his own infirmities and imperfections, he labored earnestly for the attainment of such excellence. Orthodox in his belief, and reverent in his deportment, he faithfully endeavored to order his daily walk in accordance with that of his great Exemplar, and to bring every impulse of a somewhat excitable temperament into subjection to His precepts. This was more particularly remarkable towards the close of his life; when, impressed with the conviction that the end was approaching, his disposition and manner became singularly childlike and affectionate, calling forth the love and admiration of all around him. He died at his residence in Philadelphia, on the 4th of April, 1867, after a short illness, of serous apoplexy, in the 66th year of his age; meeting the approach of death with the calmness and resignation which characterized his life, and with humble confidence in the merits of his Saviour.

Life will take a darker hue from his departure; but the remembrance of his beaming smile, his hearty welcome, his words of hope and encouragement, his unconquerable resolution, his love of right and scorn of wrong, and his undoubting faith in the final triumph of good over evil, remain to cheer and comfort us during the remainder of our pilgrimage, and to allure us onward and upward along the path which he trod.

All, all are gone; but mid the gloom
A bright and cheering ray is shed,
And memory, bending o'er his tomb,
In certain faith bewails her dead.

L.

PHILADELPHIA, April 17, 1867.

New Publications.

BOOKS AND PAMPHLETS RECEIVED.

THIRD ANNUAL REPORT OF THE BOARD OF STATE CHARITIES OF MASSACHUSETTS. January, 1867.

CONSTITUTION AND BY-LAWS OF THE DISTRICT MEDICAL SOCIETY OF THE COUNTY OF HUDSON, NEW JERSEY, 1867.

AN INQUIRY INTO THE ORIGIN OF MODERN ANÆSTHESIA. By the Hon. TRUMAN SMITH, Member of the U. S. House of Representatives for the 26th, 27th, 29th, and 30th Congress, and of the U. S. Senate for the 31st, 32d, and 33d Congress.

BERKSHIRE MEDICAL COLLEGE, FORTY-FOURTH ANNUAL CATALOGUE. 1867.

REPORT OF THE PENNSYLVANIA HOSPITAL FOR THE INSANE, for the year 1856. By THOMAS S. KIRKBRIDGE, M.D., Physican in Chief and Superintendent. 1867.

FORTIETH ANNUAL REPORT OF THE BOARD OF INSPECTORS OF THE WESTERN PENITENTIARY OF PENNSYLVANIA, for 1866.

ADVICE TO STUDENTS. AN ADDRESS DELIVERED AT THE OPENING OF THE MEDICAL LECTURES OF HARVARD UNIVERSITY, Nov. 7, 1866. By Prof. C. E. BROWN-SÉQUARD, M.D., 1867.

MEDICINE AN AGGREGATE OF PROGRESSIVE SCIENCES. VALEDICTORY ADDRESS AT THE COMMENCEMENT OF THE UNIVERSITY OF MARYLAND. By Prof. F. DONALDSON, M.D., 1867

PRACTICAL DISSECTIONS. By RICHARD M. HODGES, formerly Demonstrator of Anatomy in the Medical Department of Harvard University. Second Edition, thoroughly revised. Philadelphia: H. C. Lea, 1867.

VALEDICTORY ADDRESS BEFORE NATIONAL MEDICAL COLLEGE OF WASHINGTON. By JOHN ORDRONAUX, M.D., LL.B., Prof. of Physiology and Medical Jurisprudence. 1867.

REPORT OF BOARD OF TRUSTEES OF MASS. GEN. HOSPITAL. 1866.

OBSTETRICS THE SCIENCE AND THE ART. By CHARLES D. MEIGS, M.D., late Professor of Obstetrics, Jefferson Medical College. Fifth Edition. Philadelphia: H. C. Lea, 1867.

Medical News and Items.

DR. I. RAY, the well known psychologist, has retired on account of ill health from the superintendency of the Buller Hospital for the Insane at Providence. Dr. John W. Sawyer is his successor.

A NEEDLE IN THE PERICARDIUM, CAUSING DEATH BY HÆMORRHAGE.—A woman, aged forty, was recently admitted and died rapidly with symptoms of fainting, and on examination after death the pericardium was found full of blood which had escaped from wounds caused by a needle. The needle was probably swallowed and eventually worked its way from the œsophagus, in which it probably at first lodged on its way to its final destination.

THE NEW YORK QUARANTINE BILL.—The new Quarantine bill recently passed the Senate, provides that the proposed buildings for the detention of passengers coming in infected vessels but not actually sick, shall be built on the West Bank; but in case it becomes necessary to use a temporary site until the buildings are erected, Barren Island may be used. It also provides that the boarding station of the Health Officer shall be on the west end of Coney Island, and no infected vessel shall be permitted to anchor in Gravesend Bay. One hundred thousand dollars are appropriated for these purposes.

CHOLERA is reported to have broken out at Port Glasgow and Jersey.

REGISTERING NEW-BORN CHILDREN IN FRANCE.—A long-standing regulation in France requires each father or mother to take their children, within three days of their birth, to the Town-hall, and there show them to the registrar. There has been of late considerable discussion in the various French papers concerning the absurdity of the practice. Many children are said to have lost their lives by a compliance with the regulation; especially has this been proved to be the case with those little ones who have been thus carried out in inclement weather and during the severe winter months.

Delegates to American Medical Association from New York Pathological Society.—Drs. Ellsworth Eliot, W. B. Bibbins, E. Krackowizer, A. E. M. Purdy, W. Parker, L. A. Sayre, W. H. Draper, H. B. Sands, A. C. Post, R. F. Weir, S. Rogers, T. C. Finnell, and George F. Shrady.

M. Follin, the distinguished editor of the "*Arch. Gén. de Médecine*," was recently elected member of the Academy of Medicine, subject to the approval of the Emperor. The candidates were M.M. Legouest, Demarquay, A. Guérin, Giraldès, and Verneuil.

Prof. John Goodsir, of the University of Edinburgh, died March 6, at Wardie.

A School for Vivisection.—There is about to be established at Paris a special department of the School of Medicine for the study of practical physiology. What a pity it is that we cannot follow the example, if for no other reason than to supply the President of the Society for the Prevention of Cruelty to Animals some more material for sensational correspondence in the public prints.

The International Medical Congress at Paris will meet on the 16th of August next, and remain in session two weeks.

Super-heated Steam.—A company has been organized in this city for the purpose of introducing Carvalho's patent for super-heating steam. The apparatus is capable of supplying pure, dry steam, of any required temperature. The value of this agent, as a disinfectant, has been so well established by the experiments of Dr. Bell, of Brooklyn, that any means to perfect its application deserve a thorough trial.

Prevention of Purulent Resorption by Ergotine.—Dr. Labat, of Bordeaux, claims that the administration of ergotine in eight doses of five or six grammes daily, for eight or ten days, is attended with very beneficial results in preventing purulent infection.

Amblyopia produced by Smoking.—M. Viardin has reported three cases of amblyopia produced by smoking.

Medical Club of London.—The medical club so long talked of in London has at length been fairly established, and numbers nearly six hundred members.

Physical Culture.—A gymnasium establishment upon a capital stock of $25,000, in shares of $50 each, is talked of in this city, in which every branch of physical culture shall be taught.

A Suggestive Fact.—Damascus, the oldest city in the world, contains 84,000 people. Leavenworth, Kansas, though founded only twelve years ago, has nearly 25,000 inhabitants.

Forced Medical Attendance.—The physicians in Peru are compelled to attend any one who may call on them, at any hour day or night, and in case of refusal are liable to a fine of fifty dollars. An unjust as well as unnecessary measure.

New York Hospital and Bloomingdale Asylum.—From the annual report of the Governors of the Society of the New York Hospital and the Asylum for the reception of the insane at Bloomingdale, it appears that the whole number of patients treated in the New York Hospital during the year 1866 was 2,645. The number of patients in the hospital on the 31st of December, 1865, was 243, and there were admitted during the year 1866, 2,402. The number cured was 1,536; relieved, 475; discharged at request, 68; discharged as improper objects, 23; eloped or discharged as disorderly, 32; died, 283; total, 2,412. Remaining 31st December, 1866, 233, making a grand total of 2,646. There were 95 inquests held at the hospital during the year, of which 10 were in cases of railroad accident.

The number of patients in the Bloomingdale Asylum on the 31st day of December, 1865, was 171, and there were admitted during the year 132, making a total of 303. Of these, 66 were discharged recovered; 33 improved; 12 not improved; 24 died, and 168 remained on the 31st of December, 1866.

The receipts of both institutions, during 1866, amounted to $209,697.44; the expenses to $198,111.94. On the 31st of January, 1865, the indebtedness was $96,450.50, against $84,872, at the same date in 1866.

The rate of board for seamen entitled to the benefit of the United States Hospital fund, has been raised from $6 to $7 per week; the rate for other patients is $6 per week for males, and $5 for females—much less than the actual cost of each patient to the Institution.

N. Y. State Inebriate Asylum.—The trustees of the State Inebriate Asylum, at Binghampton, N. Y., have secured the services of Albert Day, M.D., as superintendent. He was the originator and successful manager of the Washington Home, of Boston, for the treatment and cure of inebriates. They hope to open the institution for the reception of patients about the 1st of May next.

Managers of the Hudson River State Hospital for the Insane.—The following managers have been duly appointed by the Legislature:—Abiah W. Palmer, of Amenia; William Kelly, of Rhinebeck; Dr. Cornelius R. Agnew, of New York city; Dr. A. Cooke Hull, of Brooklyn; Amasa J. Parker, of Albany; Dr. Edward L. Beadle, of Poughkeepsie; George Clarke, of Newburgh; Joseph Howland, of Fishkill; and John P. H. Tallman, of Poughkeepsie.

Peculiarities of Chinese Practice.—The physician approaches the sick-room with courtesy and politeness, and having ascertained the nature of the disease of his patient, proceeds to prepare his prescription. Their prescriptions generally are vast compounds; they go on the supposition, very common with other practitioners, that it is best to give several remedies together, so that one or another of them will hit the case. Sometimes they compound as many as fifty to eighty ingredients, and stew them all together and then administer. They hardly ever prescribe less than fifteen or twenty simple medicines. The physician is not so much a prescriber as a seller of medicines. He tells his customers what he thinks is best for them, or their friends; but it is very frequently the case that they make the selection. For instance, he may make up a prescription of ten or thirty remedies to be compounded, when the question will arise, how much is this to cost? The physician makes as low an estimate as possible, and replies. The patient, or friend, may think it is too high, that it can't be afforded; and one article and another is thrown out, to reduce the cost—often the articles most valuable to the patient. In some cases they cannot agree on a prescription, or its price, and the patient deliberately gives himself to die rather than pay the price demanded.—Dr. Wiley, *Cinn. Lancet and Observer*.

Dr. Joseph Ember, of Vienna, one of the lecturers in the University, gives popular lectures on "The Ear, and its Proper Care," in the hall of the Imperial Royal Academy of Sciences, in Vienna, to which ladies and gentlemen are admitted free of charge. This would hardly do in New York.

Cholera is appearing in Berlin, although in a sporadic form; yet showing epidemic tendencies.

American Medical Association.

EIGHTEENTH ANNUAL MEETING, CINN., O.

TUESDAY, MAY 7, 1867.

FIRST DAY.

THE Association convened at 11 o'clock, in Hopkins's Music Hall, and was called to order by the President, DR. HENRY F. ASKEW, of Delaware. After a prayer by Rev. H. M. Storrs, D.D., of Cincinnati, Dr. John A. Murphy, as Chairman of the Committee of Arrangements, welcomed the delegates in a brief address; after which he announced the places of meeting of the different "Sections."

DR. MURPHY also announced the time and places of the various entertainments and receptions.

After the calling of the roll of delegates by the Secretary, the President delivered his inaugural address, a copy of which was requested for publication.

REPORTS OF COMMITTEES.

The Reports of Committees were next called for, and disposed of as below designated.

On Quarantine, Dr. Wilson Jewell, Pennsylvania, Chairman. Not present; subject dropped. On Ligature of Subclavian Artery, Dr. Willard Parker, of New York, Chairman. Postponed for the present. On Progress of Medical Science, Dr. Jerome C. Smith, New York, Chairman. No report ready; Committee discharged. On the Comparative Value of Life in City and Country, Dr. Edward Jarvis, Massachusetts, Chairman. Postponed for the present. Drainage and Sewerage of Cities, etc., Dr. Wilson Jewell, Pennsylvania, Chairman. Absent in Europe; Committee discharged. On the Use of Plaster-of-Paris in Surgery, Dr. James L. Little, N. Y., Chairman. Report referred to the Section on Surgery. On Instruction in Medical Colleges, Dr. Nathan S. Davis, Ill., Chairman. Made special order for Wednesday morning at 10 o'clock. The report on Medical Education took a similar course. On Rank of Medical Men in the Army, Dr. D. H. Storer, Mass., Chairman.

Dr. D. H. STORER stated, that owing to illness during a portion of the time allotted him to give the subject requisite attention, he was unable to report; that one member had been absent for some time, and another had assured him that it was inexpedient at present to urge further reforms. Report received and Committee discontinued.

RANK OF MEDICAL MEN IN THE NAVY.

Dr. W. M. WOOD, U. S. N., Chairman, reported through Dr. Ninian Pinkney, U. S. N. He contended that while men of the medical profession were everywhere recognised as the equals of those in other professions, in the navy they were degraded below the military, inferior in age, in experience and rank. He said: "Our service is overgrown with usages which sprang up in the earlier and ruder ages of naval life, and still cling to it with a power and tenacity which almost defy modern enlightenment, progress, and even law. It is probable that the national authorities which organized the existing rank of medical officers intended to confer a more substantial fact than the usages of shipboard life have permitted. Among the usages of the service is that which limits an officer's rights and comforts to the apartments in which he messes, even though his rank actually entitles him to higher privileges and greater comforts than belong to those of an inferior rank who make up the majority of the inmates of that apartment. The steerage is the most humble of those apartments, and is the dwelling-place of the very young, or those of no responsibility. The ward-room gathers in it most of the commissioned and some warrant officers, and was originally occupied by none of higher rank than lieutenant. All its usages and government are still conformed to the scale of that grade.

"Now, make a medical officer in name an Admiral, and leave him to be ward-room officer, and the title becomes ridiculous. It is sunk below the usages and restrictions originally designed for those of junior years and inferior rank.

"There is only one mess which is superior to these restrictions, and that is the mess or messes of the commanding officers, and their associates, who may range in rank from a Lieutenant-Commander to an Admiral. Sometimes there are one, sometimes two of those messes. This is very properly left to the will of the Commander-in-Chief, who may choose that he and his Captains may have one or separate establishments. The Assistant Surgeon enters the service with the rank of 'Master.' That this title may not be misunderstood, it may be necessary to explain that it is the lowest rank in the ward-room. For the incumbent is in modern times generally a graduate of the Naval Academy, awaiting his promotion to lieutenancy. Like the 'Master,' the Assistant-Surgeon at once becomes a member of the ward-room mess, and unless the number of partitioned off sleeping-berths contained in the ward-room are occupied by his seniors, he may have the good fortune to occupy one of those that are dimly lighted by an air port, six inches in diameter. This space is so restricted, and the separation from the common apartments is so slight, that words in an ordinary voice in another become common property."

After further presenting the discriminations against medical men in regard to shipboard accommodations, the Doctor said:

"The general law is, that no officer shares in prize money unless his name be borne upon the books of the vessel making the captures, and the Admiral or Commander-in-Chief has a percentage on all prizes made. The Fleet-Surgeon, as a member of the Commander-in-Chief's staff, must be with him in the flag-ship, and as a rule at the post of greatest risk, responsibility, and hazard; consequently he is not likely to have his name borne upon the books of the subordinate vessels making captures, and yet no share of prize-money is allowed him."

The report suggests the following as the remedy for these evils:

1. After they have reached the rank of Commander, or are filling the position of Fleet Surgeon, let them be by right, as they often have been by courtesy, members of the cabin mess. If the mess of the Commander-in-Chief be too exalted a social position for the members of your profession who are filling the important position of Fleet-Surgeon, then let them be members by right of the mess of the Commander of the ship and the Fleet-Captain.

2. An equitable arrangement of prize-money, most important in principle, your Committee hope to see effected. It will, however, require future legislation.

In European countries, the Doctor said, more liberal regulations prevail in regard to naval surgeons than in democratic America.

The late Admiral Foote, so justly distinguished for his large medical liberality, advocated the highest rank for naval medical officers. An Admiral among the most distinguished in the service, has authorized it to be officially said, that he thought the Fleet-Surgeon

should, in our service, as in the French, be a member of the Commander-in-Chief's staff and family. We regard it as opposed to the public interests of the service, which can never be sacrificed to gross indignity without detriment.

Dr. John C. Hupp, of Wheeling, W. Va., offered the following:

Resolved, That the able, practical, and eloquent report just read by Commodore Pinkney, in behalf of medical officers of the navy, be referred to the Committee on Publication, with instructions that it be published. Carried.

Dr. Pinkney then offered the following:

Resolved, That a special committee of five members be appointed by the President, to present this subject before the President of the United States and the Secretary of the Navy, and urge the adoption of the changes proposed. Carried.

Dr. Post, of New York, moved that the same committee be instructed to memorialize Congress on the subject of awarding prize money to medical naval officers. Carried.

The Committee on Insanity, Dr. Isaac Ray, of R. I., Chairman, made no response.

Dr. H. R. Storer, of Mass., opposed the motion to drop the subject, and commented upon the exclusiveness of Insane Asylum Superintendents. He said that the Committee evidently did not, in accordance with their policy, intend to report, and alluded to their spirit as manifested in Dr. Ray's printed statements, that none but experts should testify in the courts regarding matters affecting the sanity of the individual. He suggested, therefore, that this Committee be discharged and a new one created.

The subject was, on motion, postponed for further consideration.

The Committee on American Medical Necrology, Dr. C. C. Cox, Md., Chairman, reported the performance of its duties, but owing to the length of the document, the reading was for the present deferred.

The following Committees, not being present, were discontinued:

On the Causes of Epidemics, Dr. Thomas Antisell, D. C., Chairman. On Compulsory Vaccination, Dr. A. N. Bell, N. Y., Chairman. On Leakage of Gas-Pipes, Dr. J. C. Draper, N. Y., Chairman. On Alcohol and its Relations to Man, Dr. J. R. W. Dunbar, Md., Chairman.

The Committee on the Various Surgical Operations for the Relief of Defective Vision, Dr. M. A. Pallen, Mo., Chairman, had no report. Dr. Pallen's request to be excused from further service on the Committee was granted.

The following Committees, having made no response, were on motion also discontinued.

On Local Anæsthesia, Dr. E. Krackowizer, N. Y., Chairman. On the Influence upon Vision of the Abnormal Conditions of the Muscular Apparatus of the Eye, Dr. H. D. Noyes, N. Y., Chairman. On the Comparative Merits of the Different Operations for the Extraction of Vesical Calculi, Dr. B. I. Raphael, N. Y., Chairman. On the Therapeutics of Inhalation, Dr. J. Solis Cohen, Pa., Chairman.

The following Committees were represented as likely to report, and passed for the present:

On the Deleterious Articles used in Dentistry, Dr. Augustus Mason, Mass., Chairman. On Medical Ethics, Dr. Worthington Hooker, Conn., Chairman.

Of the Committees "On the Climatology and Epidemics of the several States," the reports of Drs. Alfred C. Garrett, of Massachusetts, and R. C. Hamil, of Illinois, being the only ones ready, were referred to the Section on Meteorology, Medical Topography, and Epidemic Diseases.

The Reports of the Treasurer and of the Publication Committee were then submitted.

The recommendation of the Publication Committee that the payment of money for prize essays be abolished, and that in lieu thereof a certificate with a hundred printed copies of the essay be furnished the author, was debated as a motion, and deferred for further deliberation on the morrow.

The following papers were read by title and disposed of as below designated.

"On the Causes of Cholera." By Dr. N. S. Davis, of Illinois. Referred to Section on Meteorology, Medical Topography, and Epidemic Diseases.

"On a New Medium for the Preservation of Anatomical and Pathological Specimens." By Dr. Clapham. Referred to Section on Anatomy and Physiology.

"On the Action of Belladonna in Diseases of the Cornea." By Dr. Joseph S. Hildreth, of Chicago. Referred to Section on Surgery.

"A Bibliography and Observations on the Present Condition of Aural Medicine and Surgery." By Dr. Lawrence Turnbull, of Philadelphia. Referred to Section on Surgery.

"An Abstract of the Report on the Therapeutics of Inhalations." Referred to Section on Practical Medicine and Obstetrics.

"Observations on the Application of Rhinoscopy in Diseases of the Ear." By Dr. Lawrence Turnbull. Referred to Section on Surgery.

"Clinical Thermometry in Diphtheria." By Dr. Joseph G. Richardson. Referred to Section on Practical Medicine and Obstetrics.

"On Extra-Uterine Fœtation." By Dr. Stephen Rogers, of New York. Referred to Section on Practical Medicine and Obstetrics.

"On the Treatment of Diseases by Atomized Medicinal Substances." By Dr. I. Field, of Iowa. Referred to same Section.

The hour for the meeting of the various Sections was fixed at 3 P.M.

The Meeting then adjourned to meet on Wednesday at 9 A.M.

Wednesday, May 8, 1867.

Second Day.

Dr. Henry F. Askew, President, in the Chair.

The Association met pursuant to adjournment. The following were announced members of the Association by invitation:

Drs. J. Taylor Bradford, Augusta, Kentucky. John P. Phister, Maysville, Kentucky. Wm. L. Atkins, Geo. H. Whiting, A. B. Duke, M. L. Forsythe, Paul Rankin, of Kentucky. M. W. Junkins, Galen Hart, E. P. Harrison, of Ohio. D. R. Greenly, Meadville, Pennsylvania. Fred. Wolf, Concord, Maryland. Eugene B. Harrison, Napoleon, Ohio. B. F. Hart, Marietta, Ohio.

Dr. Atkinson moved that a recess of five minutes be granted to enable the delegates to make their appointments to the Committee on Nominations. Carried.

The time having expired, the Secretary announced the Nominating Committee:

For Vermont, J. N. Styles; Mass., H. R. Storer; R. I., Otis Bullock; Conn., B. H. Catlin; N. Y., Ellsworth Eliot; N J., Samuel S. Clarke; Penn., John L. Atlee; Del., H. F. Askew; Md., J. J. Cockrill; W. Va., J. C. Hupp; Ohio, R. McIlvaine; Ky., D. W. Yarnell; Indiana, J. S. Bobbs; Ill., H. A. Johnson; Mich., A. B. Palmer; Iowa, J. C. Blackburn; Mo., B. F. Shu-

mard; Texas, Hurd; D. C., Johnson Eliot; U. S. N., Ninian Pinkney; U. S. A., J. J. Woodward; Wisconsin, N. Dalton; Kansas, John Parsons; California, T. M. Logan; Tenn., T. A. Atchison.

A communication from Prof. Alden March was then read, in which he announced for transmittal to the custody of its proper officer, an album containing the photographs of the Presidents of the Association, from its organization up to the present period. He also declared his intention to add the portraits of future Presidents.

The gift was accepted with thanks.

Dr. March made a few pertinent remarks in return.

Dr. Cox read the report of the delegation to the Foreign Medical Associations, giving an interesting resumé of the proceedings of the British Medical Association, which met in Chester, England, August, 1866.

Report received and referred for publication to the appropriate Committee.

DELEGATES TO THE INTERNATIONAL MEDICAL CONGRESS.

The President then appointed as delegates to the International Medical Congress, Drs. B. F. Barker, J. E. Tyler, and T. C. Brinsmade.

Dr. Atlee moved that the Nominating Committee be instructed to suggest additional names. Carried.

Dr. H. R. Storer rose to disclaim any intention of personality in the remarks made by him the day previous. As he had learned that Dr. Ray, of Rhode Island, intended to read the report of his Committee before the Association, he moved that he be made a member by invitation, and be requested to read his paper at 9 o'clock to-morrow morning.

Dr. Hibbard objected to departing from the rule of referring such papers to appropriate sections, as it would establish a precedent that might consume valuable time of the Association hereafter.

Dr. Walker, of Mass., in a few remarks defended the superintendents of Asylums for the Insane. He claimed that no discourtesy to the Association was intended by those gentlemen. He explained that the reason why they did not unite with this organization was, that their duties and interests as hospital superintendents were different from those of ordinary physicians.

Dr. Gross hoped the report of Dr. Ray would not be referred, but be treated with the courtesy of a hearing in open session.

Dr. H. R. Storer again disclaimed any intention to give offence. He had endeavored to satisfy Dr. Walker of this, but he did not succeed.

The report of Dr. Ray was then made the special order for Thursday, at 9 A.M.

The Committee on nominations were instructed to meet in the Reception Room.

Dr. Atkinson proposed that the committee called for by Dr. Pinkney's resolution consist as follows: Drs. N. S. Davis, Ills.; J. M. Toner, D. C.; S. D. Gross, Pa.; J. J. Cockerill, Md.; H. F. Askew, Del. Carried.

The report of the Committee on Medical Education then came up pursuant to a previous resolution making it a special order.

Dr. Gross, as Chairman of the Committee on Medical Education, presented the report of the same, which was on motion referred to the Committee of Publication.

Dr. Stille followed with a summary of the proceedings of the Convention of Medical Teachers.

Dr. Davis, as Chairman of the Committee on Medical Instruction, then submitted his report. Referred to Committee of Publication.

Dr. Hughes took the chair during the temporary absence of the President.

THE PRIZE ESSAYS.

The Committee on Prize Essays announced that eight essays had been presented in competition, and that the following were recommended as worthy of the award.

1. "On the cause of Intermittent and Remittent Fevers." With the motto, "Fortis est veritas."

2. "On the treatment of certain Abnormities of the Uterus." With the motto, "Empiricism in Medicine and Surgery is fast giving away to the rationalism of true diagnosis."

The envelopes, opened in presence of the delegates, were found to contain the names of (1) Dr. J. D. Black, Newark, Ohio, for the first prize, and (2) Dr. M. A. Pallen, St. Louis, Mo., for the second prize.

The papers were, on motion, referred to the Committee of Publication.

Dr. Cox then read an abstract of the Report of the Committee on American Medical Necrology. Referred to Committee as above.

THE REPORT OF THE CONVENTION OF MEDICAL TEACHERS.

Dr. Sayre offered the subjoined:

Resolved, That this Association most cordially approve of the whole action of the Convention of Delegates from Medical Colleges, assembled in Cincinnati, May 3, 1867, and urge its practical adoption by all the medical colleges in our country.

Dr. Post, of New York, wished to offer some change in the course of instruction proposed.

Dr. Davis reminded him that the college to which he was attached had been invited to be present and take part in the proceedings of that Convention, but had not seen fit to do so. He could at the next meeting of that Association offer any amendment he chose, but he claimed that this body had no power to act in the matter.

Dr. C. A. Lee, of Buffalo, though not present at the Medical College Convention, approved of all that was done. He had for many years, as a teacher in a medical college, contemplated just such changes as had been recommended.

The resolution was then adopted.

Dr. Bibbins moved that the resolution abolishing the payment of money for prizes be taken up.

After an animated discussion, in which Drs. Davis, Bronson, Bibbins, and others, participated, the original motion was tabled.

THE PROPOSED ANNUAL ASSESSMENT.

Dr. Toner moved, for present consideration, his resolution offered two years ago, calling for an amendment of the Constitution to the effect, that every permanent member pay a yearly due of five dollars, and as a penalty for neglecting the same for three successive years, be liable to have his name designated by a * or † in the catalogue triennially published.

The motion, after considerable debate, was finally withdrawn.

Dr. Robbins, of Ill., submitted the following:

Resolved, That hereafter the Committee of Arrangement be directed to have the ordinances governing the sections printed on slips, and distributed at the several places where the sections meet.

Carried.

Dr. Howard offered as follows:

Whereas, There has been issued, and still remains in force, an official order from the Surgeon-General of the United States Army, prohibiting the communication of any medical or surgical information, by any medical officer of the United States Army, to any person whatsoever, without special permission from the Medical Bureau at Washington; thus appropriating

as far as the official power of the Surgeon-General can compass it, all the valuable experience and statistics of all medical men who have served in the various departments of the United States Army to the exclusive use of the Medical Bureau; and,

WHEREAS, Under such arbitrary control an official report has already been made, tending to create incorrect impressions on scientific questions of great practical importance to the profession and to society; and

WHEREAS, It is important to the reputation of all men who served during the war, that they have the opportunity of correcting such erroneous impressions by an examination of the original records; therefore, be it

Resolved, That it is the opinion of this Association that the monopoly now exercised by the Medical Bureau over the medical and surgical records of the war, is contrary to the genius and catholic spirit of our profession, and obstructive to the highest interests of science and humanity.

Resolved, That the Secretary of War, or other proper authorities, be requested to direct that the original records of the medical and surgical history of the war be rendered accessible, on certain regular days of each month, for purposes of scientific investigation, to all medical men who have served as such in the army of the United States.

DR. HOWARD spoke at length in support of the resolution. He dwelt upon the jealousy of departments against interference on the part of outsiders. He did not aim at any one in particular, as a target; he spoke for the benefit of the profession.

DR. J. J. WOODWARD replied that he was opposed to having gentlemen come here to ventilate their private griefs, at the expense of the valuable time of this learned body. Especially was he opposed to it, when the remedy sought for these griefs, whatever it may be, cannot be applied except at the expense of great public interests, now being earnestly and honestly administered by the Surgeon-General, an able and conscientious officer. Dropping therefore such minor matters, he proposed simply to explain certain reasons for the attitude of the Surgeon-General.

In the first place, those most anxious for premature access to these records are not those who have contributed most largely to them. Too often, indeed, they belong to men who might have contributed much but who have contributed nothing, and who desire now to enjoy the fruits of the labors of others. It would be necessary to close the record against such men, even if no other reason for such a course existed. But, in the next place, it would be impossible to give such access to all the outsiders who desire it, prior to publication, without gravely interfering with the scientific labors now in progress and postponing, perhaps indefinitely, the publications now preparing.

It has been said that it is not certain when any of this material will be given to the profession. As to that he was not prepared to say too much, but this he would say, although he did not come here intending to announce it, that in the course of the next two months the Surgeon-General will give to the public as a first instalment of the labors he has undertaken for the good of the profession, an illustrated catalogue of the museum, which will contain about a thousand finely printed quarto pages, embracing among other things the histories of more than four thousand surgical cases of which we have specimens. (Great applause.) Other material will follow in due time; but for a work like this we need time. As regarded the correction of errors, the Surgeon-General had never opposed any obstacles whatever.

But there is another and still graver reason why the access asked cannot be granted. These records are not used for scientific purposes alone; they are employed in settling the pensions of the widows and orphans of our dead soldiers; and the bounty, back-pay, and pensions of the disabled; fifty searchers, as many as the nature of the records permit, are daily at work with them for this purpose; no outsider can be permitted to intrude, without gravely prejudicing this work, the execution of which is imperatively demanded by every consideration of humanity. When he left Washington there were about six thousand unanswered claims still upon his table. The question then before the Convention was simply this: Shall further obstacles be interposed to delay a work now being honestly executed? He hoped, therefore, for the seal of the Association's condemnation upon this attempt to meddle with a conscientious public servant, in the discharge of his duty. He would now move to lay these resolutions on the table. (Great applause.)

The motion to lay on the table was seconded and carried almost unanimously.

DR. COX presented advance proof-sheets of "Provisional Nomenclature of Disease," which was published in London. Referred to Section on Practical Medicine. Also another, "On Compulsory Vaccination," by Dr. A. N. Bell, of Brooklyn, New York, was presented by deputy, and, on motion, referred to the Committee on Hygiene.

DR. HAMMER offered a series of resolutions regarding certain proposed reforms in medical pupilage. Referred to Committee on Medical Education.

DR. R. H. GILBERT, of New York, exhibited an instrument for the protection of the periosteum in excisions, etc. Referred to Section on Surgery.

DR. POST read the report of the Committee on Medical Literature, in which he gave certain bibliographical items, referring to reports, etc.

DR. SAYRE criticised certain portions of the report as being too highly laudatory of the Board of Health of New York, and as containing matter foreign to the scope of such a production. He also made some remarks upon cholera and quarantine, and claimed that there were few if any cases of that disease to combat, and that these same had been introduced by breakages of the quarantine.

DR. DAVIS supported the spirit of the Committee's report, and moved that it take the usual course of reference to the Committee on Publication, which was adopted.

DR. HIBBARD offered the following:

Resolved, That the habit of using unofficinal preparations of medicine by physicians, except where there is no officinal preparation that will answer the purpose as well, is unscientific and imprudent, tending to demoralize the therapeutist and to encourage irregular pharmaceutists and nostrum makers, and should be abandoned.

Resolved, That the profession should not patronize druggists who are engaged in the manufacture of nostrums.

On motion, tabled.

The following papers, in the course of the meeting, were read by title, and disposed of as follows:

"Observations on Diseases of the Throat, as seen in the Military Service from 1861 to 1865." By Prof. M. K. Taylor, M.D. Referred to Section on Practical Medicine and Obstetrics.

"A Novel Case of Lithotomy," by Dr. Edward Whinnery, of Iowa.

"On Ligature of the Subclavian Artery," by Dr. Willard Parker, of N. Y.

Also, "On Hip-joint Operations," by Dr. Paul F. Eve, of Tennessee. All referred to Section on Surgery.

"On Compulsory Vaccination," by Dr. A. N. Bell. Referred to Committee on Meteorology, Medical Topography, and Epidemic Diseases.

The Secretary read an authenticated communication from the Chicago Medical Society, announcing the expulsion of Dr. Jonathan D. Brooks and Dr. N. Peterson from aforesaid body for violation of the Code of Medical Ethics. The names in question were ordered to be dropped from the roll of the American Medical Association.

A communication proposing that no person who is not a member and supporter of a local Medical Society, where such a one exists, shall be eligible to membership in the American Medical Association was, on motion, laid over until the next year, as duly provided for by the Constitution.

The Association then adjourned until 9 o'clock the following morning.

THIRD DAY, MAY 9, 1867.

DR. H. F. ASKEW, President, in the Chair.

MORNING SESSION.

The Association met at 9 o'clock pursuant to adjournment.

DR. D. H. STORER, of Mass., moved that a recess of five minutes be granted before the reading of Dr. Ray's paper, which had been set down as the order of the day. Carried.

DR. D. H. STORER then proposed that, inasmuch as the Treasury of the Association was somewhat in debt, a sufficient sum be raised at the present meeting to put it into a better financial condition.

A motion to levy an assessment of two dollars upon each member, with the understanding that the contribution should be voluntary, was made.

DR. C. A. LEE stated that he proposed the same method last year, and was most happy to second it.

DR. DAVIS, of Illinois, offered the following:

Resolved, That Dr. D. H. Storer be requested to draw up a subscription paper, and place it in a suitable locality, accessible to the members, and that all present be asked to subscribe such amount as they feel disposed for the purpose of liquidating the indebtedness of the Association and replenishing its treasury.

Adopted.

FEMALE MEDICAL EDUCATION.

DR. ATLEE, of Philadelphia, offered the following preamble and resolutions:

WHEREAS, The subject of female medical education is exciting attention, and regularly educated female physicians have established themselves as practitioners of medicine; and,

WHEREAS, Female medical colleges, embracing all branches taught in other colleges, and all their conditions for graduation, exist in the United States for the separate education of females; and,

WHEREAS, It is important that the standard of education and the observance of the code of medical ethics should be fostered and maintained by this Association; therefore,

Resolved, That the American Medical Association recognises well-educated female physicians by the same laws that govern its own members.

DR. BOWDITCH rose to a point of order. He reminded the President that the five minutes' recess had just expired, and would, therefore, move to lay the whole matter on the table. Carried.

REPORT OF COMMITTEE ON INSANITY.

DR. CLEMENT A. WALKER, of Massachusetts, apologized for the absence of Dr Ray, and stated that the precarious condition of Dr. R.'s health had impelled him to resign his position as Superintendent of the Asylum. He then read the Report of the Committee on Insanity. He combated many of the popular notions and even the professional theories on the subject. He alluded to the law of hereditary transmission, and maintained that insanity was controlled by some law of normal limitation, oftentimes requiring only an exciting cause.

Hereditary disease must have had an origin at some time, that it seldom passes through all its stages in a single individual. More than one generation is required to develop *all* the stages of the disease. The essential thing is nervous impairment. Cerebral vitiation, self-induced, strong distracted nervous irritation during pregnancy, are heritable. *All* the traits of one parent, however, cannot be expected to descend to any single individual of his offspring. Insanity is not therefore an unmitigated evil, not amenable to treatment. Recent investigations have developed the fact, that the obscurer forms of the malady were never previously recognised. The throwing of the veil of insanity over human delinquencies as a legal defence, has long stood in the way of a dispassionate investigation. Popular prejudice may defer the verdict but cannot affect the truth of science. He scouted the idea that the students of insanity, by a strange perversity, gradually come to consider that all are more or less insane. So then, the more thorough the investigation, the more fallacious the conclusions!

Monomania was not recognised until the present century. Moral perversion is an accident, not a necessary accompaniment of the malady. Considering the brain as the material instrument of the mind, it of course is subject to the operation of physical and extrinsic causes.

Insanity has no essential feature common to every case, but the people will not accept this axiom because it conflicts with old opinions. No metaphysical subtlety is, however, to be pitted against the deductions of common sense. Responsibility is an available plea only in disease, because in health the mind is also healthy.

Moral Insanity is therefore something more than a mere fiction.

As regards treatment, not to mention the various methods of purgation, emesis, etc., the most dangerous was founded on the theory that insanity was essentially inflammatory. He denounced the other modes of physical assault, powerful mental shocks, etc., and eulogized the more rational treatment of cheerful surroundings, etc.

DR. H. R. STORER moved the acceptance of the report and its reference to the Committee of Publication. Carried.

DR. CHIPLEY, of Lexington, Ky., offered some remarks in vindication of the Superintendents of Insane Asylums, with reference to their connection with this association. He alluded to the fact that there were five such Superintendents present, who were a larger proportion of their class than the representatives of any other class of the medical profession present. Regarding the allegation that a proper verdict could not be rendered except by the Superintendents, he would inquire whether all questions of trade were not referred to its own particular class.

During his speech Dr. Chipley paid a glowing tribute to the services of Miss Dix, who had done so much for the insane of the country.

The Committee on Nominations made the following report:

Place of meeting next year—New Orleans. Time—May.

OFFICERS FOR 1868.

President—Samuel D. Gross, Penn.

Vice-Presidents—1st, A. C. Post, N. Y.; 2d, John H. Atlee, Penn.; 3d, D. W. Yandell, Ky.; 4th, H. R. Storer, Mass.

Permanent Secretary—W. B. Atkinson, Philadelphia, Penn.

Assistant Secretary—J. G. Richardson, New Orleans.

Treasurer—Caspar Wistar, Philadelphia, Penn.

Committee of Arrangements—W. Storer, Warren Brickell, S. Chapin, John Foster, L. T. Pimm, S. M. Berniss, and C. Beard, all of New Orleans.

Committee on Medical Associations—H. B. Palmer, Mich.; W. H. Byford, Ill.; M. L. Linton, Mo.; Gustave C. E. Weber, Ohio; H. R. Storer, Mass.

The Committee on Medical Necrology was continued, with the following changes to supply vacancies:

John Shrady, N. Y.; J. M. Toner, D. C.; Thomas M. Doran, Cal.; A. G. Field, Iowa; H. F. Askew, Del.

Committee on Medical Literature—Geo. Mendenhall, R. R. McIlvain, Geo. C. Blackman, E. Williams, C. S. Connor, all of Cincinnati.

Epidemics and Climatology—W. F. Thoms, N. Y.; J. W. Hatch, Cal.; Joseph Jones, Tenn.; J. F. Heard, Texas; and E. K. Hart, Conn.—substituted for Dr. B. H. Catlin.

Committee on Prize Essays—Burnett Dawler, S. A. Smith, W. Brickell, S. M. Bemiss, J. Scott, all of New Orleans.

Committee on Publication—F. G. Smith, Caspar Wistar, W. B. Atkinson, W. Maybury, all of Pennsylvania; H. F. Askew, Delaware; H. R. Storer, Mass., and W. W. Dawson, Ohio.

Delegates to International Medical Congress—Drs. Paul F. Eve, Edmund Andrews, C. E. Brown-Séquard, Thomas M. Logan, R. R. McIlvain, John M. Kitchin, B. Fordyce Barker, Thos. C. Brinsmade, John E. Tyler, J. M. Toner, and Louis Elsberg.

The Committee recommended the adoption of the following:

Resolved, That the Committee suggest to the Association that, in future, the publishing committee be requested to publish the name of every member of each standing committee.

A motion that the report lay on the table until that of the minority of the Committee was read, was declared lost.

Dr. Davis moved that the report of the Committee be accepted, and their resolution adopted. Carried.

Dr. Bibbins, of N. Y., asked the reason why New Orleans was named, and whether or not any delegate from Louisiana was present.

Dr. Davis moved that the portion referring to the proposed place of meeting, together with the special local Committees and local Secretary, be laid on the table. Carried.

The report of the Nominating Committee, with the exceptions indicated, was then adopted.

Dr. Davis then called up the part of the report regarding the place of meeting, and again protested against the selection of New Orleans, on various grounds. He presented the following:

"*Resolved*, That the next annual meeting of the American Medical Association shall be held in the City of Washington on the first Tuesday in May, 1868, and every second year thereafter, until otherwise ordered by the Association.

"*Resolved*, that whenever the Association shall meet in the City of Washington, as directed in the above resolution, the Committee of Arrangements be strictly forbidden either to provide themselves, or accept provision by others, of any entertainment or excursion whatever."

Dr. Yandell, of Ky., spoke eloquently in behalf of a profession which no war had ever yet disunited, and claimed for his brethren of the South the privilege of entertaining the Association.

Dr. Griswold, of Ohio, moved the substitution of Knoxville, Tenn., for Washington, D. C.

Dr. Sayre moved to substitute New Orleans, as in the original report. He thought that, with Dr. Davis's resolution of restriction as to entertainments, there would be no objection to that place.

Dr. Cox endorsed all that had been said by his friend from Kentucky; was proud that one man from the South had expressed himself as standing on the platform of the union of the medical profession. He never supposed there would be any difficulty in reuniting the profession of medicine after the war was over. As to the entertainments of the Association, he was in favor of them, and thought if Dr. Davis's measure was adopted the usefulness and attendance of the Association would be impaired. In England they did far more eating and drinking than was done here, and yet they accomplished a large amount of work.

Dr. D. H. Storer, of Boston, said the object of these meetings was to bring as many of the profession together as possible, and it should meet in such places as would accomplish that object. We should not meet where we have not been invited by resident members. The probability was, we would be well received, but we ought to wait for a proper invitation.

A motion to postpone the discussion until the next Session then prevailed, after which the Association adjourned to meet at 3 P.M.

AFTERNOON SESSION.

The Association met and adjourned, there being no quorum present.

Friday, May 10, 1867.

FOURTH DAY.

Dr. H. F. Askew, President, in the Chair.

Drs. J. D. Staebler, J. P. Walker, and P. F. Maley, of Cincinnati, Ohio; Dr. G. M. Kellogg, of Keokuk, Iowa; Dr. A. J. Larey, of Mount Pleasant, Kansas; Dr. Wm. Marsden, of Quebec; Dr. John Dillard, of Lexington, Kentucky; Drs. S. S. Gray, and A. S. Ashton, of Piqua, Ohio, were made members of the Association by invitation.

THE CASE OF DR. HINKLE.

A delegate presented papers involving charges against Dr. F. Hinkle, and asked that his name be stricken from the roll of members.

Dr. Atkinson, in presenting Dr. Hinkle's defence, moved a reference of the whole matter to the Committee of Medical Ethics.

The Chair ruled that the reference was out of order, and decided that Dr. Hinkle's name be erased.

ADDITIONAL DELEGATES TO INTERNATIONAL CONGRESS.

The following were, on motion, elected additional delegates to the International Medical Congress to be held in Paris next August.

Drs. Wilson Jewell, of Pennsylvania; Ninian Pinkney, U. S. N.; John Hart, of New York; and Charles A. Pope, of Missouri.

Dr. Hibbard, of Illinois, then presented the following, which was carried.

Whereas, It has been officially announced that for the last two years the annual volume of Transactions of this Association could be published only by the members of the Publication Committee becoming individually responsible for the cost of the same above the amount of funds in the treasury; and

Whereas, Such a condition of affairs is impolitic for the Association and unjust for the Committee: therefore

Resolved, That the Association does not expect the Committee on Publication to issue the volume of Transactions for the present year, unless it can be done with the funds and the credit of the Association.

Dr. Hildreth submitted a resolution.

"That a Committee on Ophthalmology be appointed to report at the next session."

Adopted.

Drs. Joseph S. Hildreth, of Chicago, Illinois, Henry D. Noyes, and Cornelius R. Agnew, of New York, were appointed said Committee.

THE NEXT PLACE OF MEETING TO BE WASHINGTON, D. C.

Dr. Davis's resolutions regarding the next place of meeting, etc., were then ordered from the table.

Dr. Hammer suggested St. Louis, Mo., as having favorable claims for the consideration of the Association.

After a lively debate, during which several amendments to the original resolution were entertained, the motion finally prevailed in the following form:

Resolved, That the next annual meeting of the American Medical Association shall be held in the city of Washington on the first Tuesday in May, 1868, and every second year thereafter, until otherwise ordered by the Association.

Resolved, That whenever the Association shall meet in the city of Washington, or elsewhere, as directed in the above resolution, the Committee of Arrangements be strictly forbidden either to provide themselves, or accept provision by others, of any entertainment or excursion whatever, which will conflict with the regular business of the body or its Sections.

CULTIVATION OF THE CINCHONA TREE.

Dr. Atkinson read a communication from Dr. Henry F. Lyster, Secretary of the Wayne Co. (Mich.) Medical Society, requesting that some action be taken by the American Medical Association regarding the "Introduction of the cinchona tree in the United States." For the sake of giving form to the discussion, he presented the subjoined:

Resolved, That a Committee of three be appointed by the Chair, whose duty shall be to memorialize Congress relative to the cultivation of the Cinchona tree.

Carried.

Drs. J. M. Toner, and F. Howard, of Washington, D. C., and Dr. C. A. Lee, of Poughkeepsie, N. Y., were appointed said Committee.

Dr. Atkinson read by title a paper from Dr. E. Harris, of N. Y., upon the "Causes of Cholera." Also another by Dr. E. Krackowizer, on "Local Anæsthesia."

Dr. Davis, in view of the fact that the hour of adjournment was rapidly approaching, offered a resolution which he thought would meet all objections.

Resolved, That such papers and reports as the several Sections have not been able to act upon, be referred to a Special Committee of *three*, to examine and act upon in all respects as is required in the proper Sections.

Carried.

The Committee as appointed consisted of Drs. N. S. Davis, D. H. Storer, and C. A. Lee.

Dr. Harris's and Dr. Krackowizer's papers were then, on motion, referred to said Committee.

Dr. Atkinson read by title "Synopsis of an Essay on the Contagion, Infection, Portability, and Communicability of the Asiatic Cholera in its relations to Quarantine. With a brief history of its origin and course in Canada, from 1832. By Wm. Marsden, M.D."

Dr. Marsden made a few remarks in explanation of the objects, etc., of the paper.

Dr. Sayre moved to refer the paper to the Committee of Publication. Carried.

ALTERATIONS IN THE PLAN OF ORGANIZATION.

The following was offered by Dr. Cox, of Maryland:

Resolved, That a committee of five be appointed by the Chair to take into consideration such amendments or alterations in the plan of organization of this Association, and to remedy defects, if any, and increase its efficiency, and report at the meeting in 1868. Adopted.

Drs. C. C. Cox, J. M. Toner, W. B. Atkinson, J. J. Woodward, and John Shrady, were appointed in accordance with the above.

Dr. Davis moved that the resolution referring Dr. Marsden's paper to the Committee of Publication be reconsidered. Carried.

The motion to refer said paper to the special committee as previously provided, was then carried.

Dr. B. Howard, of N. Y., owing to the absence of the Secretary, read the report of the Surgical Section, which, after some corrections, was accepted.

CHOLERA AND QUARANTINE.

Dr. Charles A. Lee, of New York, then submitted these resolutions, bearing upon the subject of Cholera, which were adopted as the sense of the Convention.

Whereas, it was declared by a vote of Congress at its last session, that it is not within the Constitutional powers of the General Government to establish a general and uniform system of quarantine for the different ports of the United States, and Whereas, the cholera infection has been introduced into the United States, and did doubtless manifest itself in many of the cities, towns, and villages, of our country during the present season, and

Whereas, the experience of the city of New York and other places, both at home and abroad, has demonstrated the efficacy of certain chemical disinfectants, especially *carbolic acid* and the *sulphate of iron*, in destroying or preventing the spread of cholera *virus*, it is hereby as urgently recommended by this Association, that the attention of physicians of the United States be chiefly and constantly directed to the prompt and free use of such disinfectants wherever the cholera poison may show itself,—

Resolved, That as the experience of Europe and the United States has satisfactorily shown that the cholera poison cannot be controlled or kept in check except where the *cordons sanitaires* are absolutely prohibitory of all intercourse, as was the case in the entire Island of Sicily, and the entire coasts and frontier of Greece, during the recent cholera epidemic, and,

Whereas, there is no good reason to believe that the people of the United States would not submit to the enforcement of such prohibitory measures, and non intercourse, as is necessary to hold the cholera poison in check, especially after its introduction into the country, it is hereby recommended to all municipal bodies and Boards of Health to pay special attention to requisite sanitary measures, such as the cleansing of streets, lanes, and alleys; the supply of pure drinking water to the inhabitants; the ample provision of chemical disinfectants, and their prompt employment in necessary cases; the separation of the sick from the healthy, in the same dwelling; the inspection and regulation of tenement houses; the provision of nurses, hospitals, and competent physicians for the sick poor, who may be attacked; provision for early burials of the dead; the separation of the corpses from the living; and the prohibition of the custom of waking the dead, and all other measures which have been found necessary to control the progress of the disease

Resolved, That experience proves that the publication of the facts connected with the existence and progress of cholera in any place, instead of disturbing the popular mind, while it reveals the exact extent of the danger, robs it of the hold of alarm and fear, with which the imagination surrounds indefinite pestilence, walking abroad by noon-day.

Dr. H. R. Storer read the minutes of the section on Psychology, which were on motion referred to the Committee of Publication.

The reports of the section on Practical Medicine, and on Meteorology, were read and disposed of in like manner.

The Committee on Nominations submitted their report as amended. The changes are:

Committee of Arrangements.— Drs. Grafton Tyler (Chairman); William P. Johnson, F. Howard, William Maybury, Lewis Mackall, T. F. Many, J. M. Toner, *Assistant Secretary*, J. W. H. Lovejoy; Added to *Com. on Necrology* Dr. Samuel Willey, of Minnesota; and Dr. Samuel M. Welch, of Galveston, Texas.

REMUNERATION OF PERMANENT SECRETARY.

DR. M. A. PALLEN presented the subjoined:

Whereas, it was the intention of the resolution originally introduced, creating the office of Permanent Secretary, to pay said officer a certain sum annually, as a salary for services as such; and, Whereas, Dr. William B. Atkinson, our present efficient and urbane Secretary, has never received any money whatsoever in payment of said services, therefore,

Be it resolved, that the Permanent Secretary hereafter, and from this date, be authorized to draw a warrant upon the Treasurer for the expenses incurred in his attending each session of the Association, and that the Treasurer is hereby instructed to pay the same.

Unanimously adopted.

DR. ATLEE moved that the thanks of the Association be tendered to the Permanent Secretary, for past services. Carried.

THE ANNUAL ASSESSMENT AGAIN.

DR. TONER proposed the following, which includes an article of the Constitution with the amendments added: The sum of five dollars shall be assessed annually upon each delegate to the Sessions of the Association, as well as upon each of its permanent members, whether attending or not, for the purpose of raising a fund to defray the *necessary* expenses of the Association, and for printing the Transactions. The payment of this assessment shall be required of the delegates and members in attendance upon the Sessions of the Association previously to their taking seats and participating in the business of the session. Permanent members not attending, shall forward their yearly dues to the Treasurer, and thereby shall be entitled to receive a copy of the printed Transactions, the same as delegates. Referred, after an animated debate, to Committee on Revision of Constitution and By-Laws.

DR. HIBBARD asked that Dr. H. R. Storer be permitted to use, in the preparation of a paper, certain matter previously presented by himself to the Association. Permission granted.

Votes of thanks to various railroad companies, and others, for courtesies extended the Association, were then passed.

DR. HIBBARD'S resolutions, regarding the use of unofficinal preparations, and the relations between the profession and the venders of nostrums, were then called up.

DR. POST called attention to the proper distinctions between the terms, "unofficinal" and "magisterial."

DR. COX, as an amendment, desired to insert after *manufacturing*, the words, "advertising or selling quack medicines or nostrums." Lost.

DR. BIBBINS moved the reference of the whole subject to the Committee on Revision of the Constitution, etc. Carried.

FEMALE EDUCATION AGAIN.

DR. ATLEE then pressed his resolutions on the subject of Female Medical Education. A motion to take them from the table was carried by a vote of 56 to 52.

DR. PALLEN, of Missouri, was opposed to the discussion of the subject. Women were not by nature fitted for the practice of medicine. It had been tried in Europe, and had proved an utter failure. Ladies possessed of any delicacy could not acquire the proper amount of knowledge. Imagine a young lady, with gigantic chignon and garbed in silks, entering the charnel-house, and bending over a corpse, microscope in hand, searching for cancer cells, etc., etc.

DR. DAVIS thought the discussion of this subject, at this time, would only furnish newspaper gossips with a subject, and could do no possible good. He therefore moved to refer the whole subject to the Committee on Medical Ethics.

DR. BOWDITCH, of Mass, was opposed to this way of disposing of such an important matter. He had moved yesterday to lay the resolutions on the table, simply because he thought the Convention was not then prepared to act upon them. The question had nothing to do with the laws of nature or the manner in which ladies were to acquire the proper amount of knowledge. The question was simply whether or not they should be recognised when they *had* acquired that knowledge, as many of them undoubtedly had.

The Doctor mentioned several instances in which the practice of medicine by lady physicians had been attended with great success.

DR. DAVIS'S motion to refer to Committee on Medical Ethics was carried by a large majority.

DR. HIBBARD moved that Dr. Theophilus Parvin, of Indiana, be appointed to render a special report on the Surgical Diseases of Women, at the next annual meeting. Adopted.

A vote of thanks was tendered to Mr. F. Hopkins, for free use of his Hall.

A communication from Dr. J. Homberger, expressing his desire to resign from the Association, was received, and finally referred to Committee on Medical Ethics.

After a resolution, offered by Dr. S. C. Hughes, thanking the Press for impartial reports of the proceedings, Dr. C. A. Lee read the following:

THE PROVISION FOR CHRONIC INSANE.

Resolved, That providing for the poor chronic insane in the jails and almshouses of our country, as at present practised in nearly all the States of the Union, is a gross violation of the laws of humanity, and contrary to the Divine injunction of "doing to others as we would be done by."

Resolved, That where the regular hospitals for the insane of a State are insufficient to accommodate both acute and chronic cases that are sent to them, this Association would strongly recommend the procurement of a suitable amount of land in the vicinity, and the erection of convenient, well-planned, and well-ventilated, but comparatively inexpensive buildings, in connexion with and under the same general supervision as the hospitals themselves, where those who are able to labor, and would be benefited by light and regulated employment, may be suitably accommodated and properly cared for.

Resolved, That the example of Massachusetts in establishing asylums for the accommodation and humane treatment of the chronic insane, is worthy of all praise and imitation, and in the opinion of this Association, such institutions, if rightly inaugurated and judiciously carried on, will be a benefit to the State in an economical point of view, will raise the character of the State Hospitals, and will greatly subserve the interests of the insane generally.

Resolved, That as the present insane hospitals are capable of accommodating but a small proportion of the 40,000 insane of the United States, and as almshouse and jail provision is not adapted to their proper care and treatment, this Association would recommend to the proper State authorities, to make such further provision in the direction above indicated as may tend to the amelioration of their condition, if not the restoration of their rational and moral faculties.

Adopted.

DR. BIBBINS moved to refer to a Special Committee of five, to report to the next annual meeting. Carried.

Dr. C. A. Lee, N. Y.; Dr. Guntry, Ohio; Dr. John Fonerdin; Dr. Walker, Mass.; Dr. Chipley, Ky., were appointed said Committee.

Dr. Cox submitted the below-named resolutions, which were unanimously adopted:

THE LATE SURGEON C. S. TRIPLER, U.S.A.

Resolved, That in the loss of Surgeon Charles S. Tripler, U. S. A., who died in this city since the last meeting of the Association, the profession throughout the country, the army of the United States, and the Society especially, have experienced a serious loss.

Resolved, That in the high moral integrity, Christian character, professional ability, and conscientious love of his vocation, we recognise in Dr. Tripler one of the truest illustrations of a sound physician and a good man.

Resolved, That the condolence and sympathies of this Association are hereby tendered to the family and relations of the deceased; and the Secretary is directed to communicate to them a copy of these resolutions.

Dr. Davis moved that the Committee charged with procuring suitable accommodations for the Association meetings in the Smithsonian Institution, in Washington, D. C, be continued. Carried.

Dr. Alden March, of New York, offered the following:

Resolved, That the thanks of the Association are due, and are hereby tendered to the President and retiring officers for the ability, impartiality, and courtesy manifested in the discharge of their arduous duties.

Carried.

Dr. Cox moved that surplus copies of the Transactions of the Association not yet out of print, be sent to the Secretaries of similar organizations in exchange for the volumes published by their own bodies. Carried.

Dr. Hughes presented the following:

Resolved, That those members of the Association who have contributed to the amount of five dollars to the publishing of future Transactions, shall be entitled to any back volume of the Transactions to the amount of same, as they may want.

Carried.

After the passage of several votes of thanks the meeting adjourned at two P. M., to meet at the time and place previously designated.

Meeting of Sections.

SURGICAL SECTION.

Sessions at the Medical College of Ohio, May 7 and 9, 1867.

The meeting was called to order at 3 P.M. Prof. S. D. Gross, M.D., of Philadelphia, was appointed Chairman, and Dr. J. L. Little, of New York, Secretary.

Dr. Joseph S. Hildreth, of Chicago, Ill., read a paper "On the Action of Belladonna in Diseases of the Cornea." The writer maintains that in certain conditions of the eye, the nervous integrity of the cornea may be so disturbed as to cause a peculiar state of anæsthesia. The dilatability of the pupil is correspondingly lessened, and the effects of atropia are of short duration. There may be either an acute or a chronic form of anæsthesia. In corneal affections with an anæsthesia and diminished dilatability of the pupils, belladonna is indicated, but with normal dilatability of the pupil and absence of corneal anæsthesia, belladonna is not required. A thorough division of the ciliary ring, and not the evacuation of the aqueous humor, affords relief for corneal anæsthesia. Paracentesis of the anterior chamber may, in some cases of this class, prove serviceable by diminishing congestion of the ciliary ring, but not otherwise.

Iridectomy, in one case, notwithstanding that it removed all intra-ocular tension, failed to relieve the corneal anæsthesia. Division of the ciliary ring, fifteen minutes afterwards, at once accomplished that result.

Dr. Hammer remarked that according to Donders, corneal ulceration was due, not to any nervous lesion, but to the lodgment of particles upon the cornea, the presence of which was not noted by the anæsthetic cornea.

Dr. Hildreth thought that the experiments of Magendie, which he would not then recite, proved directly the reverse.

Dr. Gross entertained a similar opinion.

Dr. Hildreth's paper was, on motion, referred to Committee of Publication.

"A Report on the Use of Plaster of Paris in Surgery," by Dr. James L. Little, of New York, was similarly referred.

Dr. B. Howard, of New York, read a paper entitled "Ligation, with Depletion of Varicose Veins of the Leg, with a Case of Radical Cure."

The operation consisted in first distending the veins, by causing the patient to stand upon the leg affected. A stout unarmed aneurism needle was passed behind the vein, just above the internal malleolus, and its points caused to emerge on the opposite side. The needle being then armed with a silver wire ligature, withdrawn, and disarmed, both free ends were left ready to be fastened. This process was repeated at nine different points.

The ligature first applied was secured by passing both its free ends through a hole in a small leaden disc, which was capped by a perforation of buckshot. Forcible compression with a common plyers completed the manipulation. The two ligatures in the popliteal regions were similarly disposed of.

The vein between these extreme points was then punctured in several places, and the blood allowed to escape, which it did rather freely. All the ligatures were then secured.

Paper referred to Committee of Publication.

The following, after having been read, were likewise referred to the same Committee.

On a New Method of Operating on the Bones for the lengthening of the same. By Dr. J. C. Hughes, of Iowa.

A Report on the Ligature of the Subclavian Artery. By Willard Parker, M.D., of N. Y.

A contribution to the Hip-joint operations during the late civil war, being the statistics of twenty cases of Amputations, and thirteen of Resections of this Articulation in the Southern States, by Paul F. Eve, M.D., of Nashville.

A collection of cases of Lumbar Colotomy (Amussat's operation), by Dr. Geo. C. Blackman, of Cincinnati.

The following papers were laid on the table:

Observations on Rhinoscopy, by Lawrence Turnbull, M.D., of Philadelphia.

A paper on the Bibliography and Observations on the present condition of Aural Surgery, by Lawrence Turnbull, M.D., of Philadelphia.

On the treatment of Hernia, by Chauncy F. Perkins, M.D.

A novel case of Lithotomy, by Edw. Whinnery, M.D., of Iowa.

The following committees were appointed to report at the next Annual Meeting:

On the Ligation of Arteries, Benj. Howard, M.D., of New York, Chairman.

On the treatment of Club-foot without Tenotomy, Lewis A. Sayre, of New York, Chairman.

On the Radical Cure of Hernia, Geo. C. Blackman, M.D., of Cincinnati, Chairman.

On the Operations for Hare-lip, Dr. Hammer, of St. Louis, Chairman.

On the Errors of Diagnosis in Abdominal Tumors, G. C. E. Weber, of Ohio, Chairman.

The Section then adjourned *sine die.*

SECTION OF PRACTICE OF MEDICINE AND OBSTETRICS.

SESSION AT THE DENTAL COLLEGE, THURSDAY, MAY 7TH.

The section having convened at 3 P.M., Prof. M. K. Taylor, of Keokuk, Iowa, was elected Chairman, and Dr. Edward Hall, of Auburn, New York, Secretary.

An abstract of a report on the Therapeutics of Inhalation (J. Solis Cohen, J. A. Da Costa, and Louis Elsberg, committee) was read, and laid upon the table until the report itself could be brought before the section.

Dr. Joseph G. Richardson, of New York, read a paper entitled "Clinical Thermometry in Diphtheria." From numerous observations made by the author he had become convinced that while the membrane is forming and rapidly extending, the heat of the body increases, and returns to the normal standard as the membrane disappears. The temperature of the body, therefore, affords one of the most valuable indications in the prognosis and treatment of this disease.

An interesting discussion in regard to the temperature of the body, not only in diphtheria, but in other diseases, took place, participated in by Profs. Johnson, Palmer, Comegys, Dr. Severens, Dr. Williams, and others. It was finally voted that the author be requested to continue his investigations, and report at the next meeting of the Association.

An unfinished paper, by Dr. A. G. Field, of Iowa, on the "Treatment of Disease by Atomized Substances," was presented, and the author was requested to read the same completed at a future meeting.

Portions of a paper by Dr. Stephen Rogers, of New York, on "Extra-Uterine Fætation and Gestation," containing a statement of the symptoms, and recommending abdominal section, in order to meet the indications, were read. It was voted to recommend it for publication in the Transactions. Remarks were made by Profs. H. R. Storer, Palmer, Byford, Dr. Parvin, and others, after which the section adjourned.

SESSION, MAY 9, 1867.

The section was called to order at 4 P.M. Dr. Hibbard in the chair.

The minutes of the last meeting were read and approved.

The Secretary reported that he had been unable to procure the report on the "Therapeutics of Inhalation."

After some discussion, it was voted to recommend to the Association to give the Committee on Publication discretionary power in regard to printing this report, or portions thereof, in the Transactions.

Prof. M. K. TAYLOR, of Keokuk, read a paper entitled, "Remarks on the Diseases of the Heart, as observed in the military service, 1861–5."

He remarked that in many men debilitated by malarious and other diseases, and hardship, a condition of the heart existed similar to hypertrophy. These cases resulted from a loss of muscular tone; were not serious, and were restored to health after a lengthy period of rest, and treatment of a tonic and hygienic nature.

DR. BOWDITCH had observed a similar condition in soldiers whom he had examined, as had also Dr. Gross, at Pittsburgh, Penn.

DR. HALL, of N. Y., remarked that in his examinations of several hundred returned soldiers, he had frequently detected the same cardiac condition accurately described in the paper read by Prof. Taylor.

The paper was recommended for publication in the Transactions.

The minutes of this meeting were read and approved, and the section adjourned *sine die.*

SECTION ON METEOROLOGY, MEDICAL TOPOGRAPHY, ETC.

SESSION, MAY 7, 1867.

DR. B. H. CATLIN, of Conn., was called to the chair, and DR. N. S. DAVIS, of Ill., appointed Secretary.

DR. HAMMIL read an interesting report on the Climatology of Illinois, giving reports of the sanitary condition and mortality rates of Chicago. He referred to the singular fact that in Illinois cerebro-spinal meningitis was more prevalent than in any other State.

DR. DAVIS pointed out the fact that erysipelas was once very prevalent along the watercourses crimsoned by the blood of many slaughtered animals, and that the intensity of type was proportionate to the depth of tint.

Adjourned until Thursday.

SESSION, MAY 9, 1867.

DR. DAVIS read a paper on the "Causes of Cholera," as previously appointed, after which the meeting soon adjourned.

Paper referred to Committee of Publication.

SECTION ON PSYCHOLOGY.

The Section of Psychology was organized by the election of Prof. Chas. A. Lee, as Chairman, and Prof. H. R. Storer as Secretary.

After remarks had been made by several of the members present, it was determined to recommend to the Association the names of the following gentlemen as a Committee to report upon the subject of insanity at the ensuing meeting:

Drs. Chas. A. Lee, of N. Y.; John B. Chapin, of N. Y.; A. B. Palmer, of Michigan; W. W. Jones, of Ohio; H. R. Storer, of Mass.

Upon motion of Dr. Toner, the meeting was then adjourned.

Convention of Medical Teachers.

CONVENTION OF TEACHERS OF THE MEDICAL COLLEGES.

PROF. A. STILLÉ, President, in the Chair.

MORNING SESSION.

CINCINNATI, May 3, 1867.

THE delegates met at ten o'clock in the Faculty Room of the Medical College of Ohio, and organized by the choice of Professors A. Stillé, of Philadelphia, Penn., as President; and Prof. Gustav C. E. Weber, of Cleveland, Ohio, as Secretary. After a brief service by those gentlemen, in a temporary character, the following were recognized as delegates:

Professors A. Hammer, of Humboldt Medical College, St. Louis, Missouri; W. H. Byford, Chicago Medical College, Chicago; A. Stillé, University of Pennsylvania, Philadelphia, Pennsylvania; A. B. Palmer, University of Michigan, Michigan; A. B. Palmer, Berkshire Medical College, Massachusetts; Alden March, Albany Medical College, New York; A. J. Steele, Chicago Medical College, Chicago; N. S. Davis, Chicago Medical College, Chicago; Francis Carter, Starling Medical College, Ohio; James M. Holloway, University of Louisville, Kentucky; N. R. Taylor, Medical Department of Iowa University, Iowa; J. C. Hughes, Medical Department

of Iowa University, Iowa; G. C. E. Weber, Charity Hospital Medical College, Cleveland, Ohio; F. Donaldson, University of Maryland, Maryland; J. N. McDowell, Missouri Medical College, Missouri; C. G. Comegys, Medical College of Ohio, Ohio; George C. Blackman, Medical College of Ohio, Ohio; E. B. Stevens, Miami Medical College, Ohio; George Mendenhall, Miami Medical College, Ohio; S. D. Gross, Jefferson Medical College, Pennsylvania; B. L. Lawson, Cincinnati College of Medicine; —— Read, Cincinnati College of Medicine.

Professors Holloway, of Louisville; Davis, of Chicago; Donaldson, of Baltimore; Blackman, of Cincinnati; and March, of Albany; were appointed a committee to report on the order of the different subjects which were to occupy the attention of the Convention.

After which the convention adjourned till four o'clock P.M.

AFTERNOON SESSION.

The committee on the "Order of the Different Subjects to be presented for Consideration," reported the following propositions:

"1. That every student applying for matriculation in a Medical College, shall be required to show, either by satisfactory certificates or by a direct examination by a committee of the faculty, that he possesses a thorough knowledge of the common English branches of education, including the first series of mathematics and the natural sciences, and that the certificates presented or the results of the examinations thus required, be regularly filed as a part of the records of each medical college.

"2. That every medical student be required to study not only three full years, but also to attend three regular annual courses of medical college instruction before being admitted to an examination for the degree of Doctor of Medicine.

"3. That the *minimum* duration of a regular annual lecture term, or course of medical college instruction, shall be five calendar months.

"4. That every medical college shall embrace in its curriculum at least *thirteen* professorships, including substantially the following branches, namely: Descriptive Anatomy, Physiology and Histology, Inorganic Chemistry, Materia Medica, Organic Chemistry and Toxicology, General Pathology and Public Hygiene, Surgical Anatomy and Operations of Surgery, Medical Jurisprudence, Practice of Medicine, Practice of Surgery, Obstetrics and Diseases of Women, Clinical Medicine and Clinical Surgery. That these several branches shall be divided into three groups or series, corresponding with the three years required for medical study. The first, or freshmen series, shall embrace, Descriptive Anatomy, Physiology and Histology, Inorganic Chemistry and Materia Medica. To these the attention of the student shall be mainly restricted during the first year of his studies, and on them he shall be thoroughly examined by the proper members of the faculty at the close of his first course of medical college instruction, and receive a certificate indicating the degree of his progress. The second, or junior series, shall embrace Organic Chemistry and Toxicology, General Pathology, Public Hygiene, Surgical Anatomy and Operations of Surgery and Medical Jurisprudence. To these the attention of the medical student shall be directed during the second year of his studies, and on them he shall be examined at the close of his second course of medical college instruction, the same as after the first. The third, or senior series, shall embrace Practical Medicine, Practical Surgery, Obstetrics and Diseases of Women, with Clinical Medicine and Clinical Surgery in hospital. These shall occupy the attention of the student during the third year of his medical studies, and at the close of the third course of medical college attendance, he shall undergo a general examination in all the departments, as a prerequisite for the degree of Doctor of Medicine.

"The instruction in the three series of branches is to be given simultaneously, and to continue throughout the whole of each annual college term; each student attending the lectures on such branches as belong to his period of progress in study, in the same manner as the Sophomore, Junior, and Senior classes each pursue their respective studies simultaneously throughout the collegiate year, in all our literary colleges.

"5. That the practice of selling individual tickets by members of medical college faculties, should be abolished, and, in place of it, each student should be charged a specified sum for each annual course of medical college instruction; the sum being the same for each of the three courses before graduating; and any student or practitioner who has attended three full courses in any one college, shall be entitled to attend any subsequent course or courses in that college gratuitously. The fees paid for each annual course of college instruction should be paid to the Treasurer of the college, and subsequently distributed to each member of the Faculty at such time and in such proportion as the Trustees and Faculty of each college shall determine.

6. That inasmuch as the maintenance of an efficient Medical College requires a large expenditure of money annually, and inasmuch as there is no reasonable hope of adequate endowments from the several State governments, the exaction of a just and reasonable annual lecture fee is a necessity with which all medical colleges should comply, and that $105 should be the minimum fee for each regular annual course of instruction in any medical college in the United States."

The first proposition was taken up and discussed by Professors Davis, Gross, Comegys, McDowell, Hammer, Taylor, and Palmer, and with an amendment, so as to strike out the words "natural sciences," and add "sufficient knowledge of Latin and Greek to understand the technical terms of the profession," it was adopted.

The Convention then adjourned to meet at nine and a half o'clock on the morrow.

SECOND DAY—MAY 4, 1867.

MORNING SESSION.

PROF. A. STILLÉ, President, in the Chair.

The minutes of the preceding session were read and adopted.

The Chair announced that the next business in order was the discussion of Section 2 of the Report of the Committee on the Order of Business.

Professor Gross, of Philadelphia, moved to amend, so as to insert "four" after study, instead of "three."

Remarks were made by Professors Gross, Hammer, of St. Louis; Davis, of Chicago; Palmer, of Michigan; and McDowell, of St. Louis.

The Convention then suspended the rules, for the purpose of allowing Professor Davis to introduce the following resolution:

"*Resolved*, That in all distinct propositions under the consideration of this Convention, no member shall speak more than once until all other members have spoken who wish to speak." Adopted.

Prof. W. Howard, of Washington City, moved to amend by inserting "not less than three years," instead of "three full years." Lost.

Prof. Gross's amendment was then adopted.

On motion of Prof. Gross, the entire section, as amended, was unanimously adopted.

Prof. Hammer moved to take up for consideration Section 4, prior to Section 3. Lost.

Section 3 was read, viz.: "That the minimum dura-

tion of a regular annual lecture term or course of medical college instruction shall be five calendar months."

Prof. Gross moved to amend by inserting "six" in place of "five calendar months." Carried.

Section 3, as amended, was then adopted.

Section 4 being next in order, came up for discussion. Prof. Gross moved to discuss the different parts of this section separately. First, that relating to the different branches recommended to be taught in the schools. Second, the number of professorships. Third, the division of studies. Adopted.

Prof. Hammer moved to add to the different branches Natural Philosophy and Pathological Anatomy.

Prof. Donaldson, of Baltimore, moved to act upon these propositions separately.

The vote on the addition of Natural Philosophy being taken, it was rejected.

The amendment adding Pathological Anatomy was carried.

Professor Byford, of Chicago, moved to amend by including diseases of children. Carried.

On motion, the Convention then adjourned to meet at 4 o'clock.

AFTERNOON SESSION.

The meeting having been called to order, the second part of Section 4 was called up for discussion.

Professor Gross moved to amend by inserting after the words "following branches," "to be taught by not less than nine Professors." Carried.

Remarks were made by Professors Gross, Palmer, Davis, Hammer, Howard, and Taylor.

The third part of Section 4, referring to the division of studies, was next considered.

Professor Davis moved to amend, by making that part read as follows:

"That these several branches shall be divided into three groups or series, corresponding with the three courses of medical college instruction required.

"The first, or Freshman series, shall embrace Descriptive Anatomy and Practical Dissections, Physiology and Histology, Inorganic Chemistry and Materia Medica, and Therapeutics.

"To these the attention of the student shall be mainly restricted during his first course of medical college instruction, and in these he shall submit to a thorough examination by the proper members of the Faculty, at its close, and receive a certificate indicating the degree of his progress.

"The second, or Junior series, shall embrace Organic Chemistry and Toxicology, General Pathology, Morbid Anatomy and Public Hygiene, Surgical Anatomy and Operations of Surgery, and Medical Jurisprudence. To these the attention of the medical student shall be directed during his second course of medical college instruction, and in them he shall be examined at the close of his second course in the same manner as after the first.

"The third, or Senior series, shall embrace Practical Medicine, Practical Surgery, Obstetrics and diseases peculiar to women and children, with Clinical Medicine and Clinical Surgery in hospital. These shall occupy the attention of the student during his third course of college instruction, and at its close he shall be eligible to a general examination on all the branches as a prerequisite for the degree of Doctor of Medicine. The instruction in the three series of branches is to be given simultaneously, and to continue throughout the whole of each annual college term; each student attending the lectures on such branches as belong to his period of progress in study, in the same manner as the Sophomore, and Junior and Senior classes, each pursue their respective studies simultaneously throughout the collegiate year, in all our literary colleges."

After a protracted debate, in which Professors Gross, Palmer, Blackman, Hammer, Davis, and Taylor participated, the motion of Professor Davis prevailed.

Professor Davis then moved the adoption of the entire section as amended. Carried.

Section 5 was then taken up, and, upon motion of Professor Palmer, laid on the table.

Section 6 being in order, was read, but on motion of Professor Gross was also laid upon the table until Monday morning, 6th inst.

On motion of Professor Davis, the Convention then adjourned to meet at 10 A.M. on Monday morning.

THIRD DAY.—MAY 6, 1867.

MORNING SESSION.

PROF. A. STILLÉ, President, in the Chair.

The minutes of the previous session were read and approved.

The Committee on Credentials announced Dr. T. M. Logan, of Sacramento, California, as an authorized delegate from the Faculty of the Toland Medical College of San Francisco.

Professor Gross moved to consider parts of section 4, relating to the branches to be taught in medical colleges.

Professor Hammer moved to suspend the rules for that purpose. Carried.

Professor Gross moved to amend part first, section 4, by inserting the words "Medical Ethics" after the words "Medical Jurisprudence."

Professor Palmer moved the adoption of the amendment. Carried.

Professor Comegys moved the reconsideration of section one.

After suspension of the rules this motion was adopted.

Professor Comegys moved to amend Section 1, by inserting "Elements of Natural Sciences" after the word "Mathematics." Carried.

Professor Hammer moved the adoption of the whole section as amended. Carried.

Section 6 was then considered.

On motion of Professor Donaldson it was laid on the table.

Professor Palmer then introduced the following resolution:

Resolved, That every medical college should immediately adopt some effectual method of ascertaining the actual attendance of students upon its lectures, and other exercises, and at the close of each session of the attendance of the student a certificate, specifying the time and the courses of instruction actually attended, should be given; and such certificate only should be received by other colleges as evidence of such attendance."

The resolution was adopted.

Prof. Davis moved the adoption of all the section as amended. Carried.

Prof. Gross moved to transmit a copy of these sections as adopted by this Convention, certified to by its officers, to the American Medical Association, at its next session.

Prof. Davis then introduced the following resolution:

"*Resolved*, That a committee of five be appointed by the President, whose duty it shall be to present the several propositions adopted by the Convention, to the trustees and faculties of all the medical colleges in this country, and solicit their definite action thereon, with a view to the early and simultaneous practical adoption of the same throughout the whole country. And that

the same committee be authorized to call another convention whenever deemed advisable."

The Chair appointed the following gentlemen that committee: Prof. Davis, of Chicago; Donaldson, of Baltimore; Gross, of Philadelphia; March, of Albany; Blackman, of Cincinnati.

The Chairman then introduced Dr. Vattier, President of the Cincinnati Academy of Medicine, who invited the members of the Convention to be present at the opening of the Academy in the evening.

Prof. March moved to accept the invitation. Carried.

On motion of Prof. Davis, a vote of thanks was returned to the Chairman and Secretary of the Convention for the efficiency with which they had discharged their duties, and to the Faculty of the Ohio Medical College for the use of their hall.

The President returned his thanks to the members of the Convention in a neat and appropriate speech.

Prof. Stevens moved that a formal written thesis on some professional topic shall still be regarded as one of the indispensable requirements for the doctorate.

Remarks were made by Professors Comeygs, Stevens, and Donaldson.

Professor Davis then rose, simply to suggest whether there was not some danger of entering upon the consideration of propositions involving details that might unnecessarily complicate the great leading object for which we have been laboring. Whether the time-honored and universal custom of requiring the medical students to write a thesis should be insisted on or not, would have but little bearing on the great principles involved in the revision of our system of medical education. If the standard of preliminary education which we have here adopted should be carried into effect, it would remove one of the objects for which the writing of a thesis was originally demanded. Yet, he said, it was desirable to retain the practice, if for no other purpose than to encourage every student in the habit of expressing his thoughts on paper. But the great and all important object of this Convention was simply to place the system of medical education in this country upon sound educational principles, by erecting a standard of preparatory education, by increasing the period of study, by adding to the college courses, and by determining a rational order of study. This we have now done, so far as this Convention is concerned, by the harmonious adoption of the five propositions already passed upon. And he earnestly suggested whether we had not better stop here, and devote the remainder of our time to the work of devising the most efficient means to secure the adoption and simultaneous practical execution of the provisions already agreed upon by all the colleges of our country; and leave all minor matters of detail to be determined as time and circumstances should indicate in the future.

Thereupon, on the motion of Professor Hammer, the Convention adjourned subject to the call of the committee.

DEATH FROM CHLOROFORM.—A death during the administration of chloroform took place on March 2d, at the North Staffordshire Infirmary. The patient was a boy aged fifteen, who was about to be operated upon for the removal of necrosed bone from the stump of an amputated thigh. Between two and three drachms of chloroform were used. On *post-mortem* examination the right side of the heart was found loaded with dark-colored blood, and the lungs were highly congested.—*Lancet.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA

New York, May 15, 1867.

THE LATE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

As will be seen, the meeting of the American Medical Association was quite an interesting and profitable one to all those in attendance. The delegates, of whom there was an unusually large number present, evidently came with a determination to work faithfully and harmoniously; and as a consequence a very considerable amount of ground was travelled over, and much satisfaction prevailed as to the general results of the deliberations.

We were hardly prepared for the ominous silence upon the subject of specialties, and are now unexpectedly called upon to congratulate all parties concerned in reference to a happy conclusion, evidently very generally shared, to drop all discussion upon it, at least for the present.

The meeting, although larger than usual, was not well attended by Southern physicians; but this was not, however, to be interpreted as owing to a lack of interest in the welfare of the Association, or of a desire to cultivate those feelings of professional brotherhood which are above party spirit or sectional differences. Dr. Yandell, of Kentucky, in an eloquent appeal on behalf of many of his absent brethren, gave truthful utterance to their sympathies and opinions when he assured the members that there were other reasons for so many still vacant benches than a want of desire to be present. In a word, many of the physicians of the South, in consequence of the war, are much straitened in their finances, and cannot afford even such a temporary respite from their labors as an attendance upon the meeting would involve.

The subjects discussed were so numerous, and very many of them of such importance, that we shall not attempt to review them in detail, but merely allude to them in passing, trusting for a more fitting opportunity in future for such comments as may seem to be called for.

The adoption of the resolutions offered by Prof. C. A. Lee, on the subject of cholera and the utility of quarantine, has committed the Association more fully than heretofore to this great question; and the action

which it has taken will, no doubt, result in placing the doctrine of the communicability of the disease upon that proper and scientific basis which it should have occupied a year ago.

The Convention of Medical Teachers was in every way a success, and the endorsement of its report by the Association was, on the whole, very praiseworthy. In consideration of the step taken, the friends of Medical Education may congratulate themselves that a practical reform is initiated, and that there is a promise, in the virtual permanent organization of the body, of the accomplishment of even better things. But we shall reserve more extended remarks upon this interesting theme for a future occasion.

Female education has thrust its claims upon the attention of the members, and will in time furnish food for a good deal of discussion as to the utility and practicability of a general recognition. Unhappily for the aspirations of the tender sex, the question is destined to lie over for another year, during which time ample opportunity will be given to all concerned to weigh with calmness and deliberation all the arguments *pro* and *con*.

The courtesies which were extended to the members by the profession in Cincinnati were all that could be expected from a city celebrated for the hospitality, wealth, and social culture of its inhabitants. In view of the enjoyment of the guests at the various entertainments, and the appreciation of the kindnesses tendered them, there is not much hope that the expressed opinion of a few that these gatherings are detrimental to the best interests of the Association, will meet with general favor. There is a time for work and a time for recreation; and both should be judiciously blended, in order that each of the annual sessions shall minister to the social as well as professional interests of our brotherhood.

At the end of a notice of an election for examiners in the University of London, occurs the following paragraph, which we would respectfully commend to the attention of Boards of Appointment in the United States:

"Candidates must send in their names to the Registrar, with any attestation of their qualifications which they may think desirable. *It is particularly desired by the Senate that no personal application of any kind be made to its individual members.*"

Our anxiety to furnish our readers with a complete report of the proceedings, at the earliest possible date, has compelled us to delay, for a day or two, the issue of this number; and in order to give ourselves sufficient space for the accomplishment of our purpose, we have been compelled to defer several interesting communications, which we would otherwise have been enabled to insert.

Reviews.

Infantile Paralysis and its Attendant Deformities. By Charles Fayette Taylor, M.D., Resident Surgeon N. Y. Orthopœdic Dispensary, Author of Mechanical Treatment, Angular Curvature of Spine, etc. Philadelphia, J. B. Lippincott & Co., 1867. 12mo. Pp. 119.

For a number of years Dr. Taylor has been giving his entire thoughts and energies to the development of a more rational and successful method of treatment, for a certain class of deformities, than is commonly practised even by the most intelligent physicians. His labors in this department, though they have not been unattended by a share of the oppositions and despisings with which the human race usually greet all schemes designed for its amelioration, have certainly been crowned with a success that must be most gratifying, not only to Dr. Taylor and his immediate coadjutors, but also to all progressive minds in the profession everywhere. The theory of the movement cure is founded on the best of common sense, and its practice, though requiring greater patience and skill than the administration of pills and boluses, is yet much more successful, as it is far more philosophical.

In this little volume, Dr. Taylor treats of a subject of far greater importance than the majority of practitioners may be willing to accord to it, but those who have been so situated as to have had opportunity for seeing these diseases at their genesis, and in their resulting deformities, will surely admit the necessity of a clearer understanding of this subject among medical men.

The main ideas of the work are admirably summed up by the author in the following propositions:

1. Infantile Paralysis is an arrest of negative development from some unknown cause. 2. The characteristics of this form of paralysis suggest a peripheric blight, rather than a loss of central nerve power. 3. With diminished nutrition, temperature, and muscular power, there is also diminished muscular irritability; and there is no such thing as involuntary or reflex contraction in infantile paralysis. 4. The shortening of certain muscles is not a necessary consequence of infantile paralysis; and when it does occur, it is simply the adaptation of their length to the position they happen to be in. 5. It is entirely accidental which muscles become shortened, whether flexors or extensors. 6. Hence deformities are not a necessary consequence of infantile paralysis, and when they are allowed to occur, the process of recovery is arrested. 7. When deformities have already formed, they should be treated for an ultimate end, viz. to bring the patient back to the place from which he should not have been allowed to diverge, when the treatment for his paralysis should begin. 8. Hence, tenotomy and mechanical appliances are only means to an end, the first steps of a course of treatment having in view the restoration of the muscular power. 9. The most natural means for this purpose is the supply of local heat, involving increased local circulation, together with local exercise corresponding with the position and ability of the part exercised. 10. The element of time must also be taken into consideration.

These propositions contain the leading principles of the author's philosophy, and that they will stand the test of experience we have no doubt. His theory in regard to the pathology of infantile paralysis is very clearly put in the following sentence:

"If we can conceive of a general constringing of the capillary vessels, and a shutting off of the capillary circulation, with such a physical condition as would re-

sult if the limb had been for a long time tightly bandaged, we should form a very good idea of the actual condition in infantile paralysis."

It is our belief that not only infantile paralysis but also many of the so-called hysterical paralyses of adults may be accounted for on precisely the same theory and demand the same treatment.

The special methods on which Dr. Taylor relies to increase the local circulation are, "the supply of local heat and local exercise, corresponding with the position and ability of the part exercised." For carrying out of the latter indication, he relies mainly on his mechanical appliances.

These, so far as they go, are admirable, but the author makes no mention of *rubbing* or of *electricity*, both of which have for a long time been used with success in the same class of diseases.

Although these agents have been mostly in the hands of charlatans, who have labored in blindness and ignorance, and oftentimes with detriment to the health as well as purses of their victims, they have yet in many instances stumbled upon the most brilliant success.

Electricians and rubbing doctors, whether they are aware of it or not, perform their cures in the same way as Dr. Taylor; namely, by increasing the local circulation.

Dr. Taylor says that the American people are weak in bodily vigor, and that infantile paralysis is most common among the rich. With all deference to his large experience and careful observation, we feel compelled to differ from him on this subject. It is singular that in this, the only passage of his book where Dr. Taylor shows any respect for popular prejudices, he seems to be entirely at fault. Probably many in the profession will give to this statement unquestioning assent, but we feel confident that if Dr. Taylor will take the pains to investigate this subject, with the same courage and independence that he has advocated the claims of the "Movement Cure," he will become convinced that nowhere can be found a nobler average of physical and intellectual manhood than among the native population of America: nay more, that the women of our better classes, even in our large cities, are measurably healthy as well as beautiful, and that infantile paralysis is as prevalent, or more so, among the poor and oppressed as among the cultivated and high born.

But putting aside these collateral questions, which at best must remain matters of opinion, we earnestly commend this work to the careful attention of all in the profession who feel the need of a more rational system of treatment in paralysis than has hitherto found favor.

Life in Scotland.—There are in Scotland 216,723 houses of only one apartment, a large number of which "accommodate" eight or ten persons each. Nearly 8,000 of these dwellings have no windows! One million of people, nearly a third of the entire population, live in these one-roomed houses. Edinburgh has fifteen hundred one-roomed houses, and Glasgow over twenty-two hundred. And yet Scotland is regarded as a part of the civilized world.—*Pacific Medical and Surgical Journal.*

A New Medical Society in Paris.—A new society has just been founded in Paris in order to study, *seriatim*, the different agents of the materia medica hitherto in use.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, February 13, 1867.

Dr. H. B. Sands, President, in the Chair.

THE OPHTHALMOSCOPE AND RENAL DISEASE.

Dr. Noyes exhibited an eye which had been extirpated a week ago last Sunday, from a lady 40 years of age, unmarried; and who had regarded herself as being in good health, and who had lost this eye twenty years ago by severe internal inflammation. There was disclosed, on examination of the organ, a large staphyloma of the ciliary region of the sclerotic; there was cataract, the lens oscillating back and forth, and there was no perception of light. She had not suffered any inconvenience from the eye except a sense of weariness, which would be felt sooner than in other parts of the body. Ten days previous to the operation, she living out of town, had come to the city to attend the wedding of a relative, and did not in consequence retire as early as usual. On the following morning she noticed, for the first time, that the sight of the previously sound eye was very much impaired. She had applied to several gentlemen, who had expressed the opinion that the trouble was merely sympathetic.

When she afterwards called on Dr. Noyes for advice, that gentleman was surprised to find on examination of the eye last affected, strong evidences of the existence of Bright's disease in the shape of extensive fatty degeneration, and abundant ecchymosis of the retina. An inquiry into the state of her general health failed to elicit anything satisfactory, notwithstanding she was a very intelligent lady, and was observant of symptoms. She stated that both her parents and great-uncle died of heart disease. An examination of her heart was made, and although it was somewhat imperfect, the doctor felt pretty sure that hypertrophy existed, dependent upon what cause he could not determine. A careful examination of the urine resulted negatively, the specific gravity was 1,024, and there were present a few renal epithelial scales undergoing fatty degeneration, and some crystals of the oxalate of lime. He advised the removal of the diseased eye merely to get rid of an annoyance, not viewing it, in itself, as a source of trouble. Previous to the operation, first chloroform and then ether was administered. There was considerable hæmorrhage, but this was by no means as annoying as a peculiar irregularity of the heart's action, which kept up for the first twenty-four hours after the operation.

Since that time he had carefully watched the case, and had satisfied himself of the existence of mitral insufficiency. Examination of the urine afterwards, discovered one or two appearances that the doctor felt assured were casts, as well as an abundance of vaginal and renal epithelium. He was therefore pretty strongly convinced that this was a case of chronic disease of the kidney, in which hypertrophy of the heart had supervened, and in which the first symptom appearing of any diagnostic value, was to be found in the change in the retina; that change unrecognised, but occurring during one night, culminating in an attack of neuro-retinitis, which greatly impaired the vision of an eye apparently previously unaffected.

The specimen removed was suspended in a glass cell in preservative fluid, and showed the retina completely detached by fatty degeneration between it and the choroid. The lens was free and floating about in the anterior chamber.

Dr. Sands was not inclined to think that the ophthal-

moscope could always decide as to the existence of renal disease when no other symptoms of that trouble were present. He had met with two instances during the past year in which, if he had relied entirely upon an ophthalmoscopic examination, he would have said renal disease unquestionably existed. There was, however, a disappointment in not finding any other evidences of kidney trouble.

Dr. Noyes remarked that in the present state of the question one or two examinations of the urine should not be considered sufficient to decide against the existence of Bright's disease when the ophthalmoscope had decided for it.

Dr. Newman referred to two cases of Bright's disease, the diagnosis of which was first made out by the ophthalmoscope in the hands of Dr. Althof, of New York. In both instances repeated examinations of the urine were made, for a long time without avail, when finally casts were discovered with the other symptoms of the disease. Both patients afterwards died, and the diagnosis was unequivocally confirmed by a *post-mortem* examination.

Dr. Noyes alluded to a case of renal disease which the ophthalmoscope had at first pointed out to be such, but in which no other evidences of the correctness of the diagnosis were afterwards made out, save in the diminution of the quantity of urea excreted to two-fifths of its normal amount.

Dr. Flint believed that the fact was well established, that there might be a temporary disappearance of casts and albumen for a considerable time, and yet the patient be suffering from advanced Bright's kidney.

Dr. Noyes stated that a case had occurred to him within the last week, which bore strongly upon the general question under discussion. A young man of fine, vigorous appearance, who had never suffered from ill health, except that occasioned by a capricious appetite, and more or less headache, came to his office to be treated for strabismus. On using the ophthalmoscope, however, the characteristic changes of Morbus Brightii were seen upon the retina, and an examination of the urine afterwards disclosed casts and albumen.

Dr. Flint exhibited an intestinal calculus which had been found in the intestinal canal just above the cæcum, having evidently existed in that locality for the long period of twenty years.

GRADUAL PERITONITIS FOLLOWING PERFORATION OF APPENDIX.

He next presented another specimen which had been taken from the body of a patient attended by Dr. Chas. D. Smith.

A young man, aged 18, was attacked, on the 22d of last December, with some pain and soreness in the abdomen, which was referred to the right iliac region. It increased, but he did not take to his bed until the 26th, when he was seen by his attending physician. He then presented symptoms pointing strongly towards peritonitis, but they were not sufficient to found a positive diagnosis upon. On the day following, these symptoms were well declared, and in the evening Dr. Flint was called in consultation. There was then rigidity of the abdominal walls, moderate tympanitis, tenderness on pressure, pulse 116, and the pupils were somewhat contracted from the opium which had been administered. The disease progressed, and on the following day the tympanitis was more marked, the pulse more frequent, and death finally ensued on the 28th.

The *post-mortem* examination gave evidences of general peritonitis. There was a certain amount of muddy liquid in the peritoneal cavity, recent lymph agglutinated the intestines, while the whole serous membrane was covered with an arborescent redness. The vermiform appendix was found adherent to the abdominal walls, and had a perforation about its centre. Within the cavity of this latter organ were two solid bodies, apparently fœcal in character, one of which was somewhat oval, the other more rounded.

The development of the peritonitis was so gradual that it was at first supposed (contrary to what was afterwards shown) that the peritonitis was at first idiopathic, and, of course, independent of the perforation. The treatment was by opiates freely and persistently administered.

CARDIAC DISEASE WITH PULMONARY APOPLEXY.

Dr. Draper presented a specimen of heart disease, complicated with pulmonary apoplexy. He gave the following history of the case:

The patient, a seaman, 33 years of age, was admitted to the New York Hospital on the 4th of this month. He had always been a man of temperate habits. He left Mobile twelve days before admission, in the enjoyment (as he said) of perfect health. When two days out, he took a chill, followed by pain in the left hypochondrium, and considerable difficulty in breathing and cough. He took to his bed, and two days after the chill he had some swelling of the feet, and was unable to resume his duties during the passage. When admitted to the hospital he was suffering from extreme dyspnœa, and the action of the heart was so tumultuous that the house physician was unable to detect any cardiac lesion; he however observed that the area of præcordial dulness was increased. On examining the lungs he noticed a marked resonance on percussions over the whole chest, with puerile respiration, and some coarse rhonchi. He applied dry cups and sinapisms, and administered stimulants. On the following day, the action of the heart was sufficiently regular to enable him to appreciate the abnormal condition. The area of dulness was considerably increased, though the apex was not as much displaced as might be supposed, considering the amount of hypertrophy which was present. The apex beat in the proper perpendicular, but in the sixth intercostal space. At the base of the organ there was a double murmur; the systolic was short and rough, the diastolic prolonged, soft, and higher pitched. Both of these were noticed at the base of the organ. On examining the chest, Dr. Draper found a different condition of things from that noticed by Dr. Seguin; there was dulness on percussion posteriorly, and so feeble was the respiration that he was inclined to think that there was pleuritic or pulmonary congestion; he was unable positively to determine which. The man's condition was still very critical; the dyspnœa was considerable; he could not lie down in bed, and suffered considerably from præcordial distress. He continued in this condition for four days, when he died from exhaustion.

On *post-mortem* examination made a few hours after death, the lesions found were as follows: The aorta was considerably distended just beyond the aortic valves. The aortic valves were insufficient, the left ventricle was considerably distended, and the mitral valves were also insufficient. Both sides of the heart were considerably distended with blood. On further examination, the left pleural cavity was nearly filled with turbid serum; and the left lung, which was consolidated in consequence of effusion, was found also to be the seat, along its marginal portions, of considerable interstitial apoplexy. The interesting point appeared to him to be the short period during which the patient suffered from heart symptoms. He had stated that he had never noticed any cardiac symptoms whatsoever until

after he had left Mobile. It was very evident, however, that it had existed for a considerable period, as large atheromatous plates lined the aorta for a considerable distance above the aortic valves. As the result of his observation, he remarked that the lesions of the aortic valves were those in which the patient suffered least, and supposed the reason was, that the point was one most distant from the general venous circulation. Here, as in most cases of disease of the aortic valves, the left ventricle had undergone very considerable distension, and until this distension caused insufficiency of the mitral valves, patients never suffer seriously from pulmonary congestion. When, however, this does occur, pulmonary congestion is inevitable. He thought it was very unusual to see that amount of lesion when no cardiac symptoms manifested themselves until so short a period before death. In conclusion, he remarked that there were two anomalies, one in the artery, the right carotid opening in common with the innominata, and one in the vein; there being two pulmonary valves instead of three.

DEATH FROM CHLOROFORM AT BELLEVUE HOSPITAL.

Dr. F. H. Hamilton presented the severed head of a female, for the purpose of exhibiting the results of an unfinished operation, she having met her death from chloroform. The patient was an Irishwoman, 36 years of age, who had her nose bitten off, January 1, in a brawl with a negro who it was understood was her paramour. She was admitted to the Bellevue Hospital on the same day, and on the day following was seen by Dr. H. He found that about an inch and a quarter of the end of the nose was gone, as well as the septum and columna nasi, with perhaps four-fifths of the alæ nasi. At a consultation held on the seventh day it was decided to operate for the restoration of the nose immediately.

The first operation consisted in freshening (excising) the margins of the wound upon the nose in the usual manner, and then covering in the end of the nose with a piece of integument taken from the forehead. This frontal flap was taken from the centre of the forehead, and was so prolonged upwards in the median line as to form, when brought down to its place, a columna. The pedicle, or "bridge," supporting the flap, was much wider than other operators have generally seen fit to make it, so wide indeed as to include a portion of the eyebrows. This gives greater security to the flap; but the width would be objectionable were it not that it was intended to cut this pedicle eventually, near the end of the nose, and lay it back in its original situation.

The flap thus made was turned upon itself, and made fast by side sutures.

A few days later, when adhesion had taken place through nearly all of the resected margin, Dr. Hamilton freshened the central, tongue-like prolongation, and fastening it below, constructed the columna. This united well, and "you are able," said Dr. Hamilton, "in the specimen which I present to you, to see the result at the end of one month from the date of the first operation."

It was his intention now to cut the pedicle, and carry it back to its original place, a method of procedure which he has, up to this time, adopted in four cases, and which he thought might be regarded, in its application to certain cases, as an improvement upon the usual practice. No doubt it will be better to leave the pedicle upon the nose in all cases in which the bridge of the nose is depressed, and needs elevation to give it proportion, but in cases like this he thought his own procedure ought to be preferred. Dr. Hamilton did not pretend to say that the operation may not have been made in this manner by other surgeons, only he thought it was not the usual practice.

In reference to the mode of death in this case Dr. Hamilton remarked, that the chloroform and ether were administered by a very intelligent house surgeon. The administration of the chloroform was in his absence, but this circumstance was accidental. The patient was brought into the room at ten o'clock, and placed upon the table, Dr. Hamilton having previously directed that a little chloroform should at first be given, to be followed by ether. The chloroform was poured upon an open napkin, and held some distance from the face. After a short time ether was substituted for the chloroform. Both the chloroform and the ether were manufactured by Squibb, and were chemically pure. Dr. H., on entering the room, found her talking loudly, and throwing her arms about. She was then taking ether from a cone. The noise she occasioned was too great to permit him to speak to the students upon the operation, and he accordingly waited about five minutes for it to subside. She then was quiet, and breathing naturally. Dr. H. then stepped to the other side of the table to look to the transfer of instruments to the opposite side of the patient, then turned again to the table, and back to the patient, when he discovered that she had ceased to breathe. It is worthy of note that she was at that time pallid, and that there was no appearance of asphyxia. It was Dr. Hamilton's belief that the heart had then ceased its pulsations. He could not feel any pulsation at the wrist, but did not stop to ascertain whether the carotid beat. He immediately commenced artificial respiration; turning her first upon the left side, and then upon her back, in which latter position the hand was pressed against the ensiform cartilage. In three-quarters of a minute after this there was a full inspiration, and the patient was thought to be comparatively safe. There was, however, the same long interval between this and the next inspiration. It is perhaps proper to say at this moment that the tongue had previously been pulled out, and held in that position by a tenaculum. The battery was next ordered and applied, perhaps at the end of eight minutes (the efforts at artificial respiration being in the meantime kept up). The battery was applied, with one pole over the heart, on the left side, and one over the region of the diaphragm, upon the right side. This was done without any positive knowledge as to what had been the usual practice in the application of the battery in similar cases. He had, however, noticed since, that it has been advised to apply one pole in the course of the phrenic nerve somewhere on the neck, and the other to the region of the diaphragm; the authorities to which he had referred affirming that the battery under these circumstances induces a spasm of the diaphragm, and a consequent sudden inspiration. As it was applied in this instance no effect was produced. The battery was then removed, and the patient was turned upon her left side, when one or two short inspirations followed the procedure, and then respiration failed altogether. It was not until the respiration had entirely ceased that the lips became purple. Laryngotomy was next resorted to, and a further attempt at artificial respiration made for three-quarters of an hour longer, when the patient was resigned as dead. Although the position for inducing artificial respiration was not the one recommended by Marshall Hall, still Dr. H. thought in this case, the woman being large and unwieldy, it evidently answered every purpose. An autopsy was made on the following day, but nothing was found to furnish any explanation of her death.

Dr. Hamilton, in conclusion, wished to place on record an account of several other cases of a similar operation

to the one intended to have been made, all of which had terminated favorably.

1. Sept. 22, 1855, in presence of Dr. Boardman, of Buffalo, and others, I operated on Dennis Davy, Irish, æt. 30, from Medina, Orleans co., N. Y. His nose had been bitten off, seven days before, by a man in a fight. I did not use chloroform. Having freshened the edges of the wound, I dissected up a piece of integument from the forehead, and transplanted it to the nose. It united well. Thirteen days later I cut the pedicle, and restored it to its original position. The result was completely satisfactory.

2. July 3, 1857, I operated in a similar manner upon Dr. S. Ward, of Silver Creek, Cattaraugus co., N. Y., for an epithelioma, on the left ala of the nose. The portion of nose and face removed was about one and one-half inch in diameter. I took the integument from the forehead. The success was perfect.

3. March 30, 1852, I operated in the same manner upon Pardon Davis, of Brockport, N. Y., for an epithelioma of the side of the nose and eyelid, in presence of Drs. Clark, Thatcher, Carpenter, Wood, &c., of Brockport. Mr. Davis was sixty-four years old. The skin united very promptly, but the disease eventually returned in the bone.

4. I made the same operation for an epithelioma on the side of the nose, near the eye, in the case of Parmele Parmentis, of Chatauque co., N. Y. She was then about twenty-six years old. The result was a perfect success.

Dr. Post remarked that Dr. Hamilton's method of treating the flap was not unusual, as that gentleman had intimated, but was one generally employed by surgeons. He thought that the safety of the flap in all these cases depended more upon a wide pedicle and an easy twist than anything else.

Dr. Krackowizer thought it a better plan not to transplant the flap from the forehead, but from a little outside the freshened edges. He did this in one case, and would have been successful had he not endeavored in the first operation also to form the columna. He agreed with Dr. Hamilton in the opinion that his method of treating the flap was unusual, if not entirely new.

Dr. Noyes had seen a rhinoplastic operation performed, the flap being taken from the forehead, with a good result. He also referred to one that was made by Maissonneuve, where the flap was taken from the forehead. In this case the return circulation being painful in consequence of the congestion caused in the flap, and the part being likewise of an unnatural reddened hue, a leech was applied every twenty-four hours. While the leech was on the normal hue returned, and the flap eventually survived.

Dr. Hamilton referred to a cut of a case of his published in the fourth volume of the Buffalo Medical Journal, which represented a method which he had employed of transplanting skin from the palm, radial margin, and back of the hand, to restore the nose of a man who had lost much of his nose, and was otherwise badly disfigured by a burn of the face. In that instant, by demand of the patient, the flap was separated at the end of forty-eight hours. The result was that about three-quarters of the flap sloughed, but there was, however, a very satisfactory nose left.

Dr. Sands was much interested in the description of the symptoms of the case of death by chloroform, because he thought that it tended to confirm the growing impression that such a result was due to the failure of the heart rather than of the lungs. He then related the case of a patient of Dr. Da Costa, to whom he administered a second time chloroform, for some manipulation about the elbow-joint. At the first administration everything went off well, but on the second occasion the pulse began to grow suddenly feeble, and finally ceased beating altogether. In that instance he had noticed that the stoppage of the pulse preceded that of the respiration. Marshall Hall's method was then resorted to, and the patient was eventually, with much difficulty, resuscitated. He had witnessed death in two cases from ether, both of which occurred at the N. Y. Hospital. In the first case a man was brought into the institution having accidentally cut his throat while engaged in pruning trees. The right carotid artery was wounded, and there was left a large false aneurism. The consultation decided it to be best to cut down through the swelling, and secure the ends of the wounded vessel. During the administration of the ether the doctor had his hands upon the pulse. It ceased suddenly before the respiration did. In this instance there were some signs of life. Subsequently the patient breathed again, and the pulse began to beat, so that the operation was proceeded with; but these favorable symptoms existed for only half a minute when the pulse ceased, followed by an arrest of the respiration. In the other case the patient had a cancerous tumor of the antrum, for which an operation for removal was to be attempted. The ether was administered, but the first incision was only made; a very little blood passed down the throat, and the patient died instantly by, as then supposed, syncope.

Dr. Post remarked that a similar case had occurred at Saint Luke's Hospital. The operation was for the removal of a tumor of the neck, and death occurred suddenly while the patient was under the influence of ether.

Dr. Noyes referred to a similar case of death from ether, in which galvanism was resorted to by acupuncture needles passed through to the heart.

Dr. Hamilton stated that death had occurred, at Bellevue, in two cases besides his own, after giving chloroform, and in one after giving ether. In the latter instance there was found, after death, to be a tumor in the cerebellum. He had heard, incidentally, of two others in this city, both of which occurred in private practice, one in the practice of Dr. O'Reilly, the other in the practice of Dr. Van Buren.

Dr. Cutter referred to a case that had occurred to him. One part of chloroform and two of ether were given to the patient by a cadet in the Newark Hospital. The proposed operation was one for re-amputation, and shortly after it was commenced the patient ceased to breathe. Marshall Hall's method was resorted to, and respiration was re-established; chloroform was again given, when the patient almost immediately died. The anæsthetics were given in a paper funnel, and the fatal result was probably in no small degree due to the want of a proper supply of air.

Dr. Sands referred in this connexion to the case reported by Dr. Briddon of a child who, while under the influence of chloroform, vomited, and a portion of fried liver, which she had eaten shortly before, lodged in the larynx, causing immediate suffocation.

Dr. Cutter then presented a specimen of diseased humerus, which he had exsected. The history of the case he then read from the January number of the *American Journal of Medical Sciences*, for 1866.

Dr. Hamilton desired to call attention to one or two points. In the first place the case was not one of removal of the entire shaft of the humerus in a single operation; an important portion, namely, the upper one-fourth, having been previously exsected. It was in reality then only a removal of the lower three-fourths of the bone. In the second place, he thought that the operation was unnecessary, and he furthermore thought

it our duty to make it so understood, that it might not stand as a precedent for others. The sequestrum was entirely separated from the involucrum, and could have been removed without removing the involucrum. If this had been done the patient would have had a more useful limb than at present, as the involucrum was evidently strong and able to support the limb tolerably well. And again the joint end of the bone was not dead; death having only extended to the central portion of the shaft, and there was no occasion, therefore, for removing the entire joint. He was of the opinion that in case the dead bone could not have been removed, the next best thing would have been amputation. It was easy then to infer that he was not an unqualified advocate for resection. In fact he stated that he believed, with that distinguished surgeon, Dr. March, of Albany, that too many of those operations had been done already. He doubted whether the man had a useful limb after all, and was of the opinion that when the novelty of the apparatus which he was using wore away, he would ask to have the arm amputated. Without the apparatus the arm was useless. The apparatus would require constant repair. Furthermore, the experience of the "left-armed soldiers" who had been training themselves in the use of the pen, showed that the entire loss of even the right arm might in a great measure be supplied. The time had not yet arrived for a fair verdict upon those operations.

Dr. Cutter remarked that the case was not reported as removal of the entire humerus in one operation, as the first operation of removal of the head and upper part of the shaft was credited to another surgeon. The propriety of the operation was urged upon the ground that there were numerous openings all around the arm leading to dead bone, that the necrotic tissue was everywhere felt, that the patient's health was suffering in consequence, and furthermore it was impossible to diagnosticate precisely the relation of the dead to the living. He further said that the condition of the soft tissues around the joint was such as to lead him to suspect irreparable disease of that part. He did not think that the involucrum would ever have become sufficiently strong to have made a good arm. The patient seemed perfectly satisfied with the result of the operation, and would not part with what arm was left him for any consideration.

Dr. Post stated that he had seen the patient, and was satisfied that the operation was, under the circumstances, an eminently proper one.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, April 1, 1867.

Dr. Samuel T. Hubbard, President, in the Chair.

CHOLERA AND CONGESTIVE FEVER—THEIR ANALOGIES.

(Continued from page 114.)

Dr. Edmund Fowler next read a paper upon "Cholera and Congestive Fever, their leading Characteristics, Relations, and Analogies." Having premised that he had not systematized the subject, but should speak discursively, and after an argument to prove that the premonitory diarrhœa should be considered properly a stage of cholera, Dr. F. stated the characteristics of this disease to be, "Initiative diarrhœa, violent purging, vomiting, cramps, præcordial oppression, restlessness; a quick, rapid, thready, distinctive pulse; cold surface; cold, profuse perspiration; wrinkled, sodden state of the skin on the extremities; intense thirst; a sense of burning heat in the epigastric region, and in the bowels; a rapid sinking of the powers of life, collapse, and death, or reaction and consecutive fever. In the algid form of congestive fever, in the abdominal species, we have vomiting; serous purging, which is at times flocculent; præcordial oppression, great restlessness, intense thirst, a burning heat in the epigastric region and bowels, cold skin; often cold, profuse perspiration; a small, quick, thready pulse; blueness of the lips, collapse, and death; or reaction, and not unfrequently consecutive fever, though this more often attends remittent disease. This outline presents not essentially dissimilar characteristics." The two diseases have many lesions of function, of tissue, of blood, analogous, if not identical. Again, they are alike in what may be called the lesions of expression, which, although they furnish no facts for the dissecting-knife, are as much a part of the history of disease as changes in the tissue. The language which addresses us from the rapid grouping of all the features of a case, though hard to translate in scientific terms, is often unmistakable in its indications, and may determine our happiest decisions.

In cholera, all observation tends to show that early and important changes occur in the blood, that its lesions precede and accompany the profound changes in the mucous, serous, and glandular tissues. Both its own condition and its relations to the system through the circulation are rendered abnormal. It becomes thick, ropy, and adhesive, and it stagnates in the capillaries and veins, the arteries being left nearly empty. In congestive fever one of the first things to be observed in the blood is its thickened condition. It is sometimes oily, and gathered into large, well-formed globules; at other times it is adhesive, and cannot be made to escape from the vessel. In extreme cases of congestion, proving fatal in from ten to eighteen hours, it is perfectly gelatinized in the veins. In these cases, if a vein be laid open to the extent of twelve or eighteen lines, so as completely to expose the blood, this will be found of the consistence of partially coagulated albumen, dry, adhesive, and retaining its cylindrical form after being carefully removed from the vein. I speak now of what I have witnessed while yet the patient was able to walk from his bath to the bed, where he expired within ten minutes after I had exposed the blood to view. The congestion in this case was in the chest and abdomen, the intellect remaining clear and undisturbed. This patient was a child of eight years, who had been stricken down with a malignant chill two hours before. There was no vomiting, purging, or excessive perspiration. The case was not unlike many described by Mr. Orton, in the second visitation of the cholera in India, in 1818, in which vomiting, purging, and spasm were in a great measure absent. A characteristic phenomenon of congestive fever is that the limbs in some instances, the body, neck, and face, very generally, are more plump than in health. In these cases the congestion is very profound, and attended with slight, if any, serous discharges from the bowels. The explanation is probably that the blood-plasma, exosmosed into the subcutaneous cellular tissue, becomes there partially coagulated by a like change with that seen in the veins, and so remains fixed. It is noteworthy that the spissitude of the blood, so apparently similar in the two diseases under consideration, and rarely, if ever, found in any others, should be followed by such opposing dispositions of the blood-plasma. In those cases of congestive fever, where we have abundant serous discharges, followed by sodden, wrinkled skin on the hands and feet, its parallelism with cholera is, of course, more evident.

The history of congestive fever was next discussed, especially as it had appeared in the valley of the Mississippi, and on the borders of the Gulf of Mexico

where it was so prevalent and so fatal. The conclusion was reached that prior to the year 1834, true congestive fever was unknown there. Not that it was unusual to find congestion complicating fevers and increasing their danger; but that the congestion which gave distinctive character to the fever which first startled the people of that region in 1834, culminating in 1843, was attended with phenomena so exceptional as to demand a new name. Watchful of the influence of epidemic cholera in modifying disease, even in sections where no cases of the epidemic had occurred, physicians could not but remark the resemblance between the known symptoms of that disease and those of the new type of fever. Though the assemblage of symptoms characterizing congestive intermittent is no less marked than that of cholera, its graphic description is less easy, because of the varying seat of the congestion. But in all cases, we observe that peculiar expression seen only, Dr. F. believed, where the blood parts with its plasma, and its remaining elements take on the changes that occur only in these two diseases. An important differential fact between simple congestion and algid congestion is to be seen in the effect of venesection. In the former, blood will flow quite freely from the opened vein, and if sufficient be drawn, the pulse at the wrist will become fuller, softer, and less frequent, while the patient experiences a feeling of relief. In the latter, even a small abstraction of blood is immediately followed by increased restlessness, intenser thirst, a sense of impending death, increased cyanosis of the skin, and a more rapid, thready pulse. In the first case, the temperature of the surface is increased by venesection; in the second, it is diminished. Practically, and as a basis of classification, these conditions are as important as the lesions shown at *post-mortem*. Again, many cases of congestive intermittent present no chilly sensation. The patient is dull, disposed to sleep, complains of a feeling of "tired aching," but is not conscious of a chill. The skin is cool, while he says he is burning up inside. Then, in the best defined cases, though emesis is almost constant, no bile is vomited, but a large amount of muco-serous fluid. Another matter of great moment, which appears to have been overlooked by writers, is the profound change in the nutrition of the system, following even a single malignant paroxysm. The system becomes cachectic; the skin is pale and chalky, and the face wears a look of despair. After a severe case, continued far into the inflammatory stage, not less than three years will be required to restore the normal tone of the system. Even the traces left by cholera may be effaced more easily. Both cholera and congestive fever appear to have been most fatal, and to have resembled each other most closely, in cretaceous districts.

When the miasm of yellow fever swept over the Gulf States in 1853, a new impression was given to the febrile diseases of that region. Now congestive chills are rarely seen there, and since the above date these States, except on the coast, have shown no signs of choleraic influence. As an illustration of the moulding power of epidemics, it has been noted on two or three separate occasions, in New Orleans, that when cholera and yellow fever have prevailed together, cases of the former have shown the genuine black vomit in the stomach at *post-mortem*, while the cadaver of yellow fever has exhibited the muscular contractions characteristic of cholera.

Reviewing the strong analogies between cholera and congestive fever, and remembering that it originated in a locality reeking with miasma, may we not deem cholera a fever also? a fever of a single paroxysm, with phenomena as well marked as those of the other affections classified under this head? Some of the best minds in the profession are of this opinion.

The essay concluded somewhat abruptly, Dr. F. stating that time failed him to speak, as was his purpose, of the analogous states of the capillary circulation in the two diseases. He wished to acknowledge his indebtedness to Dr. Drake for many facts and suggestions.

The paper was accepted, but the lateness of the hour precluded any discussion upon it.

Dr. Downs presented a specimen of a fœtus expelled, with the membranes intact, after a considerable amount of hæmorrhage consequent upon a fall. Dr. Peaslee and others were of opinion that the case was one of placenta prævia.

Adjourned.

EAST RIVER MEDICAL ASSOCIATION.

Stated Meeting, April 2, 1867.

Dr. V. Morse, President, in the Chair.

SPASM OF THE GLOTTIS.

Dr. Newman read a paper on the above subject. He claimed that this disease generally attacks children from the fourth to the twelfth month. Before this the health of the infant may be perfect, unless we except a certain catching of the breath when crying, for which passion gets the credit. After awhile the child becomes uneasy and restless, the head hot, the respiration difficult, which symptom may terminate in asphyxia. The disease mostly occurs during the night, being only occasionally preceded by a slight cough. The infant, after sleeping quietly for some hours, suddenly awakes in great terror, utters a piercing shriek, immediately followed by suffocation; sometimes, and indeed most usually, suffocation commences, and the shriek is only heard when respiration is re-established. This shriek bears some resemblance to that which accompanies croup or hooping-cough, but is more acute and piercing. It has a tone of its own, easily recognised when once heard. The surface is either of a bluish-red or quite discolored; the eyes are prominent and fixed, the nostrils extended, the limbs contracted and cold; the pulse, small, hard, and frequent; there are sometimes violent convulsions present, with relaxed sphincters. Should this condition continue beyond two minutes, death is likely to end suffering by asphyxia or apoplexy. On the other hand, after the respiration is restored, convulsions, strabismus, and stiffness of the limbs still continue. Sometimes all the symptoms disappear immediately, leaving the child pale and fatigued, but breathing freely, and soon falling into a gentle, refreshing slumber. At other times, and mostly when the attack is preceded by a cough, the young patient is again seized with a convulsive cough, like that of women in violent hysterical fits.

However, then, the fit may terminate, the child is soon restored to health, but not to immunity from new and gradually more frequent attacks. At first these only occur in the night and without any apparent cause, but before long they encroach upon the day, being induced by screaming, passion, laughing, running, or eating; in fact, there may be twenty attacks in twenty-four hours. In some fortunate cases, the fits are at a greater distance, they lose their intensity gradually, and disappear after lasting several months, or sometimes years; yet there always remains a predisposition to fatal relapse.

Spasm of the Glottis may occur, and has been observed in children with the best constitution and in full health; but it is mostly common among weak, scrofulous, and rickety children, dentition, gastro-muco intestinal irritation, greatly contributing to the production of the disease.

Among the special causes may be enumerated:

1st. Inflammation of the brain and its membranes.

2d. Alteration of the lymphatic ganglia of the neck.

3d. Hypertrophy of the thymus gland.

4th. Inflammation of the cervical portion of the medulla.

At the commencement of meningitis children frequently have convulsions; when they scream or cough, they suddenly turn blue, the limbs become stiff, the body and head are thrown backwards, respiration is suspended, and when restored its return is ushered in by a piercing shriek; these symptoms increase in frequency and violence with the encephalic affection.

Case 1.—*December* 28, 1865.—Was called during the night to see a child six months old, whom he found in a comatose state: the occiput was burning, the face pale, the skin hot and dry, pulse normal; the pupils exhibited no peculiar abnormality, the tongue white, urine scanty, the respiration free, the head thrown back. Its screams led him at first to suppose the child was suffering from colic, but the abdomen was soft and free from pain. When forced to swallow, the stomach would immediately reject its contents. The child had had several convulsions during the day; but up to this period had enjoyed the best of health. The parents were healthy and robust. His diagnosis was encephalic inflammation. Ordered calome lpurges, leeches, cold to the head, hot foot-baths, and frictions of croton oil to the nape of the neck.

December 29.—The calomel had operated freely, but without improving the condition; ordered more leeches, with iodide of potass.

December 30.—Violent convulsions, respiration suspended, the face blue, the head thrown violently backwards; had lost all hopes, when a violent shriek terminated the spasm, and in a few minutes the child fell into a quiet sleep. Repeated the calomel and iodide with the addition of one-sixteenth of a grain of the extract of belladonna.

December 31.—Convulsions intense, but during intervals the child appeared more composed; the fits of suffocation came on several times during the day and night.

January 1, 1867.—Convulsions less frequent, and not so violent; had but two attacks of suffocation, takes the breast readily, skin moist, pulse soft, bowels free. Continued the iodide of potass and belladonna.

January 2.—Convulsions nearly ceased, and only one fit of suffocation came on during the twenty-four hours.

January 3.—All the symptoms have disappeared; the same treatment continued until the 9th, when he ordered cod-liver oil, and the child slowly returned to usual health.

The symptoms in this case were, in his opinion, due to Spasm of the Glottis, caused by encephalic inflammation.

Inflammation of the cervical portion of the medulla may give rise to spasm of the glottis.

The late Dr. John Corrigan, of Dublin, among others, relates the following case:

Case 2.—A child four months old, who had always been in good health, suddenly became uneasy and cross; he often cried, and during the night shrieked without any apparent cause. At the end of a week a fit of suffocation came on, which lasted half a second; the child turned blue, and seemed dying, when after an acute shriek the respiration was restored. These fits came on frequently, and lasted from six to eight seconds. At the expiration of two weeks new symptoms appeared, the hands were convulsed, the thumbs bent into the palms of the hand, while the fingers were flexed the contrary way; convulsions came on once a week, then every day, then twice in the twenty-four hours. "Three months passed thus, the disease made rapid strides, and all the remedies employed produced no satisfactory results; calomel, emetics, and antispasmodics, had been tried and abandoned. At this period it was remarked, by chance, that the child scarcely moved its lower limbs, and this fact led to an examination of the spinal column, when upon reaching the third and fourth cervical vertebra, the patient uttered a piercing shriek. Four leeches were immediately applied; a few hours afterwards a fit of suffocation came on, but of short duration. Two days after the leeches were re-applied, and produced a miraculous effect. All the symptoms disappeared.

Cerebral affections are often found to produce epilepsy, and physiology shows the influence of the medulla on the respiratory apparatus; and inflammation of the spinal cord may be easily induced in children by external violence, owing to the want of thickness of the soft parts in early age.

Alteration of the lymphatic ganglia of the neck and chest, often produces crowing inspirations; the child feels suffocated, respiration is arrested, and only re-established when a piercing shriek is heard, evidently resulting from a contraction of the glottis. It most frequently occurs at night; is violent; the head and trunk are thrown backwards, and the face is pale and convulsed, the eyes fixed and turned, and the limbs contracted. Scrofulous children are usually the victims.

"Hypertrophy of the thymus" is the fourth cause which determines the spasm of the glottis; but our ignorance as to the uses, mode of development, and disappearance of the gland, has led to many doubtful points. "Is hypertrophy of the thymus congenital, or is it always acquired?" "Which are the physiological connexions inviting this alteration to lesions of the heart, by which it is so often accompanied, dilatation of the right cavities, and hypertrophy of the left ventricle?" These queries he is unable to answer. It is certainly evident that hypertrophy of the "thymus," like that of the lymphatic ganglia, produces "spasm of the glottis," by exercising pressure on the ninth pair of nerves. On a post-mortem examination it is found that the "thymus" is principally developed in the upper part, frequently extending to the jugular veins. It is easy, then, to understand, that the obstacle thrown in the way of the venous circulation of the head, will cause "meningitis;" and pressure upon the ninth pair of nerves, will cause "spasm of the glottis."

Case 3.—The following case came under his observation in November, 1853. A child nine months of age, born of healthy parents, lively and cheerful, took the breast with avidity, seldom cried; it was remarked by the parents how different he was from all the other children, for they had been as cross and ugly as this one was good-natured. The night before seen by him, after sleeping quietly for some four or five hours, the child awoke suddenly with all the symptoms of "spasm of the glottis." The attack only lasted a few seconds, when the little patient fell asleep. The next day the child appeared as well as usual. The ensuing night there was another attack; and from that time the fits came on regularly every night. Very soon they made their appearance during the day; were longer and more violent; crying, laughing, or eating, would give rise to them.

November 24th.—The child had a decided attack in the night, followed by convulsions, which continued for about twenty minutes, the carotids throbbing violently, the head and occiput unusually warm, pupils contracted, bowels constipated. Ordered leeches on the sub-sternal fossa, ice on the head, calomel, and iodide potass with belladonna.

November 25th.—Convulsions violent, the bowels had

moved freely, the skin very hot and dry, had had several attacks of suffocation.

November 26th.—The cheeks are red, the eyes prominent; the child, after vomiting, fell into a comatose state. Ordered leeches behind the ears, croton oil to the nape of the neck, sinapisms to the feet and legs.

November 27th.—Passed a bad night; the convulsions and fits of suffocation continued almost without interruption, the hands clenched, the pulse filiform.

The following day the child died, during an attack of suffocation.

Post-mortem examination, twenty-four hours after death, revealed the following: The thymus gland, which nearly covered all the anterior part of the chest, extending from the larynx to the diaphragm, and from one costal edge to the other. The lungs and pericardium were entirely concealed by the enormous mass which compressed the jugular veins at their origin; the mass weighed thirteen drachms and forty-two grains. The jugular veins were dilated, and, with all the veins of the neck, contained a large quantity of thick black blood. The lungs, though slightly developed, were healthy; the right cavities of the heart pale and soft; the left ventricle thicker than usual; the head well formed. The lateral ventricles contained about an ounce of bloody serum; the choroid plexus strongly injected; all the other organs normal.

Evidently, in this case, "hypertrophy of the thymus" was the primary affection, first producing the fits of suffocation, and later acute hydrocephalus, of which the convulsions were merely a symptom.

The differential diagnosis of "spasm of the glottis" is generally easily established:

1st. From *hooping-cough*, by the sudden appearance of the symptoms during the night, the complete suspension, and absence, of respiration and vomiting.

2d. From *croup*, by the nature of the shriek, and the normal return of the voice, and respiration.

3d. From *suffocation*, which sometimes succeeds prolonged cries, or passion; by the normal state of the pulse, the absence of cold limbs, fainting, and the pathognomonic (?) scream.

4th. From *cyanosis*, by being preceded by uneasiness, tears, groans, blue lips, less marked suffocation, and by the absence of *any shriek*.

A few words on the ætiology as bearing on the diagnosis, must suffice.

When "spasm of the glottis" is produced by inflammation of the brain or its membranes, or by chronic hydrocephalus, the cerebral symptoms necessarily first appear, and the fits of suffocation take place only when they have attained a certain degree of intensity; and the suffocation follows the same course as the encephalic affection, increasing or diminishing with it.

When "spasm of the glottis" is connected with inflammation of the medulla, there is generally some portion of the cervical region painful on pressure; suffocation is sometimes preceded by pain on the same part, and convulsions only take place in "*the thoracic limbs*," if produced "*by a fall.*"

"Spasm of the glottis," resulting from hypertrophy of the "ganglia," is met with in children of a scrofulous constitution, seldom before *the first year*, yet sometimes much later. It is frequently accompanied with cough and gastric derangement, and preceded by continual dyspnœa; and by forcing the child's head backwards, the hypertrophied cervical ganglia may almost always be felt.

Difficult as it is to recognise hypertrophy of the "thymus," the following symptoms will generally furnish a clue to a correct diagnosis: These are dyspnœa, most severe when lying on the back; a dulness over the region of the thymic gland; the tongue hanging out of the mouth, even during sleep. *Kopp*, *Graff*, and *Kommaul*, aver that these signs have never been observed except in cases where "spasm of the glottis was induced by hypertrophy of the thymus." When the disease is complicated by acute hydrocephalus, the fit of suffocation precedes the cerebral symptom.

The prognosis is always serious, as one single attack of suffocation may terminate fatally. The modifying influences are age, diathesis, probable cause, etc.

The treatment of "spasm of the glottis" presents two distinct indications. To arrest by the use of the most efficacious remedies the attack of suffocation: to combat the cause which may induce a return.

The resources in the first case are very few. The young patient must not be allowed to lie on his back; he must be carefully protected against cold and damp, and required to take moderate and regular exercise. Should he be strong and plethoric, moderation without weakening the vigorous constitution should be the rule; but if, on the contrary, he should be weak and anæmic, cod-liver oil, iron, etc., are indicated. Respiration being reëstablished, every precaution must be taken to avoid all causes that may give rise to another attack, thus: All sensations that may either induce immoderate joy or grief; violent running; the diet should be light, and of such a character as may be swallowed with little effort. Little of course is to be expected from any attempt to act directly on the thymus gland, although preparations of copper, small doses of calomel, ipecac, iodide potash, tartrate and citrate of iron, etc., together with the external use of iodine or croton oil, *seem* to favor its decrease. A blister on the chest will often prove beneficial.

After discussing the anatomy and physiology of the larynx, Dr. N. concluded that among predisposing causes may be reckoned:

1st, The peculiarity of distribution of the laryngeal nerves:

2d. The high degree of latent irritability that must exist around the sphincters of the air tube, owing to their nervous connexion:

3d. The contractors of the larynx, being more numerous, and more highly endowed with involuntary nervous energy than the dilators, indicated a desire to avoid complication in the mechanism of our being, by avoiding all unnecessary expenditure of muscular exertion in the performance of any given act. Now the larynx, in its quiescent state, is expanded, or rather dilated, such a state only being compatible with existence. Then the reason is very evident, why such a state should not require muscular exertion to maintain it so continually; for we know that the dilation of the glottis, even after the act of deglutition, depends more upon the elastic and erectile properties of the tissues adjoining this orifice, than upon mere muscular exertion. But the contraction of the larynx depends altogether on another source for its due performance. Here it is that the muscular exertion is brought into proper play, and here it is most required. If we swallow a portion of food, the larynx is hermetically sealed while the extraneous body is passing over it, and this is done by muscular exertion only; but the moment the alimentary bolus has passed into the œsophagus, the exciting cause being removed, the larynx immediately resumes its natural position, not by muscular exertion, but by its own elasticity, the antagonizing power of the constrictors of the larynx having given way. We know that this muscular arrangement is indispensably necessary, as without it life would cease. It is absolutely necessary that there should be some guarding

and controlling power over the orifices of this organ, that they may be closed against the slightest particle of offending matter presenting itself in their vicinity; and how beautifully has nature provided against such intrusions.

But if, in adult life, the larynx and its muscles are so highly endowed with sensibility, how much more so must they be in the infantile state, when the nervous system alone has the ascendency, ruling supreme over the entire system; morbidly alive to every impression, and governing the functions of the entire economy by its influence. We all know the wonderful changes which the larynx undergoes, from the period of infancy to that of puberty; the alteration in the calibre, and in the chordæ vocales. We are also aware that the young system, in progressing towards puberty, gradually loses that inordinate sensibility and irritability it possessed in infancy, and with it the larynx becomes less excitable, and more under the control of volition; hence it is that we seldom or never find laryngeal asthma attacking adults.

From the recorded history of this disease, from its near alliance to infantile convulsions, and from our own experience, we are led to the following conclusions:

1st. That laryngeal asthma, or the spasm of the glottis, is a disease peculiar to infancy, by which we mean any period within twelve months from birth.

2d. That those children who have not been nursed by the mother, are much more liable to the disease than others.

3d. That infants of nervous temperament are more subject to attacks of laryngeal asthma than those of a lymphatic or sanguineous constitution. In short, it appears to be purely a nervous disease; morbid anatomy has done little in clearing up the exact seat and nature of this disease, as there never has been found any evidence of inflammation in the supposed traits of the disease during those posthumous examinations we have on record.

Owing to the lateness of the hour, the Association then adjourned.

Correspondence.

THE TUNNEL UNDER LAKE MICHIGAN—THE CHICAGO BOARD OF HEALTH.

To the Editor of the Medical Record.

Sir—The twenty-fifth of March, 1867, was a day that will long be remembered with satisfaction by the inhabitants of Chicago; a day to be marked for ever with a white stone in the calendar of the city. The famous tunnel under the bed of the lake, excavated for the purpose of bringing pure water to the town, was formally opened by the civic authorities, and the Michigan water was admitted for the first time to the reservoir. For the first time, I say, because, though we have heretofore been nominally dependent upon the lake for our water-supply, it appears that, in consequence of the unfortunate location of the pumps at the water-works, we have been too much of the time furnished with either the sewage of the city from the mouth of the river, or with the filterings of the cemetery and the pest-house. For this the officers who located the water-works were not so much in fault as might be at first supposed. A quarter of a century ago an engine of ten-horse power, sucking water over the end of the wharf, was more than sufficient to supply the wants of the fur-traders; but when it became evident that Chicago was to be a city, the far-seeing authorities selected a spot far out of town, upon the lake shore, one mile north of the harbor. Here they erected an engine-house, with all the necessary machinery for supplying water. A stockade of piles driven into the clay, fenced in an acre of the lake, and thus the purity of the fluid was secured. Upon the provisions then made our citizens have been ever since dependent. But the growth of the town surpassed all expectation. A few years only elapsed before a line of breweries sprang up beyond the water-works. Population followed suit, and a thickly planted cemetery became conspicuous upon the high grounds near the lake. The river, too, was changed. Instead of the clear stream in which little boys had fished under the shade of the willow trees, it became a filthy cesspool, in which the contents of the sewers, the offal from the pork-packers, and the refuse of the distilleries, were thoroughly mingled by the keels of a thousand ships. All this matter was discharged into the lake, and was carried directly to the receiver at the water works, whenever a southerly wind turned the current in that direction. Great efforts were made to obviate the difficulty, but nothing seemed adequate to the occasion. At length the city engineer, Mr. Chesborough, proposed the excavation of a tunnel under the bed of the lake to a distance sufficient to insure communication with a body of water which could never be affected by causes operating along the shore. This plan was finally adopted, and the work was commenced about three years ago. A shaft was sunk near the lake to a depth of about eighty feet, and from the bottom of this well a tunnel five feet in diameter was carried horizontally at right angles with the coast. A huge *crib* was placed in the lake at a point two miles from the shore. Here another shaft was sunk to the required depth, and from that a countermine was carried inwards till it met the tunnel from the shore. The whole work was pushed through the bed of blue clay which underlies the lake, without quicksand or ledge of rock to interfere with the operations of the miners. Proceeding without accident or hindrance of any kind the enterprise was completed a few days ago, and was dedicated, amidst the rejoicings of the whole city, on the twenty-fifth day of March. We now receive the sweetest and purest water that can be found. Wholly free from sediment, it remains uninfluenced by the vicissitudes of wind and current which have been hitherto so strongly marked. The general use of such water cannot fail to remove from the community one of the most important of the predisposing causes of disease.

Another innovation fraught with blessings to our city has been recently inaugurated. We now have a board of health commissioners, similar to your Metropolitan Board of Health. This board consists of six commissioners, appointed by the judges of our Superior Court. Of these, three are physicians. The mayor is *ex officio* a member of the board, and is its president. The lay members are gentlemen of worth, who are desirous to accomplish all that lies in their power. Our profession is represented by Dr. John H. Rauch, formerly a professor in Rush Medical College, and well known, during the late war, for his remarkable executive abilities; by Prof. H. A. Johnson, of the Chicago Medical College, one of the most distinguished physicians in our city; and by Dr. William Wagner, a noted German surgeon. Thus constituted, the new commission has commenced work in earnest. The city has been divided into twenty-two districts, with a physician and a special policeman in each one to perform the duties of medical inspector and guardian of the public health. The duty of cleaning the streets is still retained by the Board of Public Works, but there is every possible manifestation of a

desire to act in accordance with the recommendations of the Board of Health. These new measures are well received by the citizens, and even the Irish are gratified by the official visits of the inspectors. The only obstacles to the efficiency of the board will arise from the magnitude of the area to be occupied by their supervision. While the Common Council, having control over the matter of salaries, misguided by an unfortunate piece of advice proffered by the Medical Society of the city, compel the commissioners to accept five hundred dollars a year as their only recompense, and while one of these overworked gentlemen has consented, without additional compensation, to discharge the duties of sanitary superintendent, shouldering this great burden in order, by saving the expense of such an officer, to render the new order of things more acceptable to the taxpayers, whatever credit may hereafter be assigned, none can ever be claimed by those who persistently opposed the adoption of all but their own pet measures for the public welfare. Secure of the approbation of an enlightened community, time will undoubtedly remedy many of the difficulties which are inseparable from every new enterprise. M.

CHICAGO, APRIL, 1867.

New Publications.

BOOKS AND PAMPHLETS RECEIVED.

PROPHYLAXIS. An Anniversary Oration before N. Y. Academy of Medicine by JOHN ORDRONAUX, M.D., LL.B.

TWENTY-FOURTH ANNUAL REPORT OF THE MANAGERS' OF THE STATE LUNATIC ASYLUM, for 1866. N. Y.

AMERICAN AS COMPARED WITH FOREIGN FECUNDITY. By H. R. STORER, M.D., Boston.

BIOGRAPHICAL NOTICE OF S. D. WILLLRD. By Dr. F. B. HOUGH, N. Y.

RESEARCHES ON SPURIOUS VACCINATION IN THE CONFEDERATE ARMY. By JOSEPH JONES, M.D., Prof. Physiology and Pathology, Nashville, Tenn. 1867.

CHLOROFORM AS AN INTERNAL REMEDY. By A. P. MERRILL, M.D.

REPORT OF THE SECRETARY OF THE NAVY. 1866.

FIFTIETH REPORT OF ASYLUM FOR THE RELIEF OF PERSONS DEPRIVED OF THEIR REASON. 1867.

ANNUAL REPORT OF COMMISSIONERS OF EMIGRATION OF N. Y. 1867.

CIRCULAR NO. 4, SURGEON-GENERAL'S OFFICE.

A THEORY OF INFLAMMATION, ETC. By NELSON L. NORTH, M.D., of Brooklyn, N. Y. 1867.

REPORTS OF COMMISSIONERS OF QUARANTINE for Jan. 23 and 29, and Feb. 16, 1865.

REPORT OF CITY PHYSICIANS OF PROVIDENCE. 1867.

THE INTRACRANIAL CIRCULATION (first prize of Boylston Medical Society, 1867). By THOMAS DWIGHT, Jr., House Surgeon of Mass. Gen. Hospital. 1867.

HUMAN TESTOIDS (second prize Boylston Med. Soc., 1867). By F. R. STURGIS, House-Surgeon of Mass. Gen. Hospital. 1867.

"WHY NOT?" A BOOK FOR EVERY WOMAN. By H. R. STORER, M.D., Boston. 2d Edition.

TREATMENT OF FRACTURES OF THE LOWER EXTREMITY BY THE USE OF THE ANTERIOR SUSPENSORY APPARATUS. By N. R. SMITH, M.D., Prof. of Surgery in the University of Maryland. Baltimore: Kelly & Piet. 1867.

SEVENTH ANNUAL REPORT OF COMMISSIONERS OF PUBLIC CHARITIES AND CORRECTION OF N. Y. 1866.

Medical News and Items.

PERSONAL.

Surgeon B. A. Clements has been transferred from the Department of the East to the Department of Dacotah. Surgeon C. H. Alden, and Assistant-Surgeon G. M. McGill, transferred from Department of the East to the Department of Missouri. Assistant-Surgeon Ely McClellan, transferred from Department of the East to District of New Mexico. Assistant-Surgeon W. R. Ramsey, transferred from Department of the East to the Department of the Platte. Assistant-Surgeons Samuel Adams and Henry McElderry, transferred from Department of the East to District of Texas.

Assistant-Surgeon C. R. Greenleaf, assigned with Examining Board at Louisville to relieve Surgeon Lewis Taylor.

THE FATE OF DR. LIVINGSTONE. — Information has reached the British Admiralty, which dispels the last faint hope of the fate of Dr. Livingstone. The *Times of India* publishes additional evidence that the great explorer is dead. An Arab had brought intelligence which leaves hardly any room for hope. If the man is to be believed, he saw poor Livingstone receive his death-blow.

THE LEAVENWORTH MEDICAL HERALD, is the title of a monthly to be issued June 1st, 1867, from Leavenworth, under the editorial supervision of Drs. C. A. Logan and T. Sinks. It is to consist of forty-eight pages of reading matter, and it is designed that its typographical make-up shall not be excelled by any similar journal in the older States. Its contents will consist of original communications from the active workers within its range of circulation; of the proceedings of the City, County, and State Societies; of reviews and book notices; of correlative scientific subjects; and of a monthly *melange* of the current medical literature of the day. The project commends itself to the physicians of Kansas, who we hope will not be backward with their literary and pecuniary contributions.

REMOVAL OF I. BAKER BROWN FROM OBSTETRICAL SOCIETY OF LONDON. — Dr. Baker Brown has been removed from the Obstetrical Society of London for alleged unprofessional conduct connected with the operation of clitoridectomy. The *Lancet*, after stating that the verdict bore no direct relation to the utility or usefulness of the particular operation, thus refers to the action of the Society: "The point which has lately been at issue was whether a Fellow of the Obstetrical Society was proved to have so far departed from the rules of professional honor as to render his retention in the Society an outrage upon the feelings of the Fellows, and a discredit to the profession of which they are members. The Society has expressed its conclusion, and this with a unanimity which precludes all doubt as to the necessity of the unusual step which has been taken. We may pronounce it as decided that the medical profession, speaking through a section of its body, utterly discountenances and repudiates the proceedings which have made one of their number notorious. It protests indignantly against the performance of a dreadful operation upon married women without the knowledge and consent of their husbands, and upon married or unmarried women without their own knowledge of the nature of the operation. It denounces the conduct of a surgeon who deliberately insults and compromises a fellow-practitioner by performing in his presence a mutilation as to which his sanction is unasked. It scorns the miserable quibbling by which a palpable want of veracity is sought to be defended."

Original Communications.

OSSEOUS TUMOR OF THE UPPER JAW.

By W. R. WHITEHEAD, M.D., etc.,

NEW YORK.

Osseous growths of the jaws present many points of interest, which are revealed by a careful study of their anatomical appearances and clinical features. It is a subject eminently worthy of remark, and might be appropriately considered at this time. I have, however, on a previous occasion endeavored to describe succinctly this variety of diseased growth of the upper jaw, in connection with other tumors of this region equally interesting and deserving of notice.* More than a general notice of the subject now would be departing from the simple design and original object of this communication; which is, the description of a case of excision of the superior maxilla, of peculiar importance, and attended with the most favorable results.

Case.—Miss F. P——, from the South, aged eighteen, of good constitution, well formed, and slightly above the medium size, was afflicted with a tumor of the upper jaw. She came to New York on the 28th of last December, and placed herself under my care for the purpose of having it removed. A few weeks prior to this date, I was consulted by her, at which time I examined the growth, and became acquainted with its previous history. At three years of age her nurse let her fall, and she received a blow, which bruised her right cheek; when six years old, a slight enlargement of the cheek on that side was first observed, which, however, was not very apparent, and caused her parents no uneasiness; but at the age of ten, the enlargement had sufficiently increased to excite their apprehensions.

Many medical gentlemen were consulted, who differed widely in their opinions regarding its nature. Topical remedies were ineffectually used, and constitutional means unavailingly essayed. About four years ago, the parents of the young lady visited Richmond with her, and consulted a distinguished surgeon, the late Dr. Chas. Bell Gibson, who advised the excision of the tumor. This gentleman expressed an unwillingness to give chloroform in the operation, and terrible apprehensions of pain deterred the parties from permitting it to be undertaken without the use of an anæsthetic. She suffered constantly from headache, during a year preceding the removal of the tumor. Two or three months previous to its excision, it grew rapidly, especially towards the orbit, and the headache increased with its extension in this direction. Last fall she had chills and fevers, which persisted irregularly until within a few weeks of the day of the operation. My first examination of the patient permitted me to observe that there was considerable deformity of the face, caused by a tumor occupying the right superior maxillary bone, slightly distorting the mouth, and making the cheek quite tense. This tumor invaded the orbit, and pressing upwards, narrowed the orbital cavity in its transverse direction, and compressed the eye. The roof of the mouth of the right side was slightly depressed. By passing the end of my index-finger behind the extremity of the alveolar arch, feeling and circumscribing the posterior and external surfaces of the tumor as thoroughly as possible, and carefully observing the deformity caused by it, I could judge with a certain degree of precision the extent of the disease. The mass appeared ovoid, had a smooth and regular surface, and to every part accessible to the touch was exceedingly hard on pressure, which was without pain.

The headache, from which she had so long suffered, appeared to be due to compression of the second branch of the trifacial nerve, and its anastomosing branches. The two last molar teeth were gone, and the remaining molar tooth was much decayed; the other teeth on that side were sound. The voice was but slightly nasal or indistinct. Mastication was not impaired to any extent, and the patient swallowed without difficulty. Apprehensions of the continued increase of the tumor, and its rapid extension recently towards the brain, excited the fears of the young lady, and caused her to desire the removal of this growth without unnecessary delay; and although its extirpation was the principal and most urgent reason for the operation, yet a very natural solicitude about the extent of deformity which might remain afterwards, was to her a source of considerable disquietude, and made me desirous to prevent, if possible, cicatricial marks about the face, resulting from incisions of the cheek, or other part conspicuously apparent.

Believing that moderate-sized tumors of the upper jaw could be removed without cutting the lip or cheek—an opinion which has already been expressed by Ferguson and some others, though not convincingly demonstrated—I experimented on the cadaver with a view to determine the degree of mobility of the parts about the mouth, and also the extent to which this cavity can be stretched by the use of well-adapted means. These experiments were simple, and appeared satisfactory. They consisted in exposing thoroughly the bony opening of the nares, by a dissection of the soft parts from the anterior nasal spine of the maxillæ, and thus facilitating the dissection of the anterior surface of either of these bones, as high up as the orbit, and rendering the nasal and malar processes quite accessible to bone-scissors and other instruments. By the use of cheek retractors, a gradual and very considerable dilatation of the mouth was effected. These experiments encouraged me to hope that I might be able to remove the tumor without cutting the lip or cheek of the patient. The only objection which occurred to me was, that the distension of the cheek or distortion of the parts might, if the mass were larger than previous examinations had enabled me to determine, render the anterior part of the tumor as high up as the orbit, inaccessible to dissection. Being prepared, however, as well as possible against all contingencies, and provided with suitable instruments, efficiently assisted, and ready to avail myself of any advantages which could not be anticipated, on the second of last January I proceeded to remove the diseased growth, and to test the value of the experiments previously made on the cadaver.

Operation.—The patient was seated in a dentist's chair procured for the occasion; and after she had taken a small quantity of brandy and water, ether was administered to her, and the operation commenced by detaching, with a pair of strong scissors, the soft parts from the anterior spine of the maxillæ, and partially exposing to view the anterior bony opening of the nares. At this time the patient commenced to vomit; she had, however, not taken any breakfast that morning, and the cause of the vomiting was attributed to the ether. Considerable delay was caused by this interruption of the operation. Ether was not again used, but after she had swallowed more brandy and water, she was rapidly made insensible to pain with chloroform, and my dissection of the gum from the tumor continued. The cheek retractors provided for forcibly stretching the orifice of the mouth were well applied, and produced a proper extent of dilatation, which could have been

* See Remarks on certain Tumors of the Superior Maxilla. New York Medical Journal. Vol. III. 1866. No. XVII.

much increased. I soon became convinced that the tumor in this case was too large and distended the cheek too much to be removed without an external incision. My previous opinion, predicated on the facility with which I could manipulate the parts on the cadaver, was modified by the peculiar extension upwards of this growth, which made its anterior and upper surfaces less accessible to instruments than could be anticipated before the preliminary incisions of the gum. Reserving, therefore, this operative procedure for a case more favorable to its adoption I promptly cut through the middle of the lip in its furrow, and extended the incision around and behind the right nostril, a short distance up the side of the nose. This incision, which is recommended by Ferguson, permitted me to complete the operation rapidly and with facility. The nasal branch of the maxilla was cut with Liston's bone-scissors, and the malar bone effectively severed with a metacarpal saw. An incision of the soft parts was then made along the posterior border of the palate bone, from the end of the alveolar arch to the middle palatine suture, and another at right angles to this incision, terminating at the alveolar of the left incisor, which was extracted. One blade of Liston's scissors was passed into the right opening of the bony nares, and the other into the mouth, and the palatine arch cut. The tumor was then wrenched out with a pair of Ferguson's lion forceps, and the remaining soft parts adherent to it were detached. One of the little palatine arteries, throwing out a fine jet of blood, was secured, after a little trouble, by a ligature; with this exception there was no trouble from hæmorrhage, but to guard against it considerable lint, some of which was saturated with a solution of Squibb's sub-sulphate of iron, was stuffed into the cavity left after the extirpation of the tumor.

The upper two-thirds of the external incision were united with ten or twelve silver wire sutures, and the cut surfaces of the lip were held in apposition with two figure-of-eight sutures. With the valuable assistance of Dr. Nathan Bozeman, now of this city, but late of Montgomery, Ala., this external incision was very neatly, accurately, and securely approximated throughout its entire length. After the application of a light dressing to the part, the patient was conveyed to her bed, and half a grain of sulphate of morphia prescribed, to be taken at night. In a few hours the pulse commenced to rise, and in the night she had considerable fever.

January 3.—Early in the morning I found the pulse 120; strong and full. She could swallow without difficulty; took strong beef-tea every few hours, and her mouth was often mopped out with a weak solution of chlorinated soda, and occasionally with glycerine. She took a few times during the day an anodyne and diaphoretic mixture, containing sulphate of morphia and swt. spts. of nitre; had very little thirst; she became restless, and late in the night her pulse increased to about 130.

January 4.—I saw her early in the morning, and commenced to give her stimulants; very soon after swallowing about half an ounce of sherry wine, her pulse was lowered eight or ten beats to the minute. She took frequently during the day brandy-whey, and beef essence; and eight drops of muriated tincture of iron in solution were administered to her every few hours. In the middle of the day her pulse was 120 to 124, and about the same at my evening visit. The same mouth-washes were used as at last visit.

January 5.—She continued to take the beef essence and tincture of iron as before; but substituted sherry wine for brandy-whey. By means of a rubber syringe with a long pipe, the upper part of her mouth was washed out several times with tepid suds of Castile soap; afterwards with clear water, and then with water containing a drop or two of creasote. In the evening she was quite restless, and had a hot dry skin, and her pulse was increased a few beats.

January 6.—I saw her at an early hour and found her much better; her pulse was only 96 to 100. Last night she was very uneasy and restless up to twelve o'clock; about that time she got rid of a lint plug which was annoying her; but soon afterwards she had a profuse perspiration, and improved rapidly. She told the attendants that she was glad that I would find her in the morning so much better. She complained of hunger, and drank her beef-tea very gratefully. To-day the hare-lip pins were removed, and the union of the lip was found to be perfect. The same detersive and medicated injections were used as yesterday. She took some chicken broth, and continued to take the beef essence and tincture of iron. A gentle aperient having failed to move her bowels, they were slightly relieved by a suitable clyster.

January 7.—Rested well last night; this morning a piece of lint became partially detached and caused her some discomfort; I removed this piece, and one or two others, with a pair of dressing forceps; syringed out the mouth with Castile suds, clear water, and weak creasote water. Continued the same medicines and nourishment. At the evening visit I removed two or three pieces of lint.

January 8.—Took out all the silver sutures; washed the parts and put fresh isinglass plaster to the lip and side of the nose, and removed all the lint plugs. I entertained doubts, as I had a few days before, whether the offensive suppuration caused by the lint, was fully compensated by the supposed security afforded against hæmorrhage by cramming the wound with this material. If all other necessary means for stopping hæmorrhage are made available, and the parts exposed sufficiently long to the air, I have no doubt that sometimes no lint would be required. It would be far better to have only the saliva, which is bland and unirritating, in contact with the surfaces of the wound, than lint. In a similar operation, about two years ago, which was attended with most excellent results, I abstained from stuffing lint into the cavity which remained after the excision of the tumor; and I believe that it would be well, if possible, always to adhere to this practice.

To-day, she is able to sit up and syringe out her mouth herself; has very little fever; said, at the morning visit, that she felt quite comfortable. Although I have requested her to observe strict silence, she will occasionally address a sprightly remark to her sister, or utter some pleasant expression, indicative of her habitually cheerful disposition.

January 9.—She continues to improve; has a relish for food; took some soft boiled eggs this morning; uses the same mouth washes; discontinued the tincture of iron.

January 10.—Last night she was restless, and about eleven o'clock she had considerable fever; I was told to-day that once or twice before she has had fever during the night. Fifteen grains of sulphate of quinia were prescribed to be given in clyster, but only a third of it at a time, and at three hours' interval.

January 11.—Doing very well; took in the same way as yesterday, twelve grains of quinine.

January 12.—She has not had a return of her fever; but the quinine was repeated once more.

January 18.—During the last six or eight days, she has been able to sit up and to walk about the house; and, if the weather were pleasant, could go out to walk. She went out this morning, in a closed carriage, and had her photograph taken, which, compared with

the one taken before the operation, exhibits a marked improvement in her personal appearance, effected by the operation that relieved her of this encroaching tumor. Desirous of having the deficiency of the upper-jaw, caused by excision of the tumor, repaired by some competent dentist, I made careful inquiry, and learned through a professional friend, that in a similar operation performed in 1842 by Dr. R. D. Mussy, of Cincinnati, on the patient Thomas McGilligan, Dr. H. Crane, dentist of this city, made a substitute for the upper maxillary bone which the patient had worn twelve years when last seen. The contrivance which the dentist Cook made, and to which Mussy refers in his publication of the case, was soon rejected by the patient as useless. Miss P. visited to-day the rooms of Dr. Crane, who is an ingenious and skilful dentist. With a little effort she can articulate quite distinctly; this is a very considerable advantage, and will aid in obtaining an excellent result, when this gentleman makes for her an artificial palate and set of teeth.

January 23.—She left to-day for her home. About two weeks after the operation, she was well enough to leave, but was detained by snow storms, which interrupted railway travel. I have recently received a letter from her, dated February 6th, and will quote a few lines from it:

"I am improving very rapidly, my color has returned with my strength, and I am sure I have already gained several pounds in weight; the soreness has almost entirely left my mouth, and it is healing up very nicely."

April 3.—Miss P. has returned to New York to place herself under the care of the dentist. The parts are entirely healed; she is no longer subject to headache, and is in the most excellent health and spirits. The space left after the extirpation of the tumor, has closed up remarkably well; the entire soft palate is preserved; and the only opening in the roof of the mouth is an oval orifice about an inch and a quarter in its longest diameter, which is antero-posterior. The eye is well retained in its natural position, and its movements are free, and easily executed. There is some flatness of the cheek, and distortion of the right side of the mouth, which is obviously caused by the disuse of the muscles on that side of the face, which defect can probably be removed by the device of the dentist.

April 18.—Dr. Crane has been eminently successful in accurately fitting to the young lady's mouth an ingenious piece of workmanship, composed in part of vulcanite, with a beautiful arch of teeth, and rose-colored gums of porcelain, appearing so natural that they defy close scrutiny. This dental attachment, which she has worn several days, enables her to pronounce with perfect distinctness; it improves her appearance, and her mouth feels more comfortable with it than without it, as it causes not the slightest irritation or inconvenience; indeed it is a most remarkable triumph of the dental art, and has, I believe, never been excelled. Having accomplished the object of her last visit to New York, she is ready to return to her home, and now enjoys social intercourse with a zest which she rarely experienced before the removal of the tumor.

Examination of the Tumor.—The tumor, after its excision, was heavy and hard, and appeared like a compact mass of hypertrophied bone, weighed four ounces and a quarter, and involves the superior maxilla and part of the malar bone. The greatest thickness of this growth is measured by its vertical diameter; its superior surface corresponds to the floor of the orbit, which before the operation, in being displaced upwards, diminished the orbital cavity in this direction to the extent of about half an inch. The inner fractured border of this surface corresponds to the lower border of the orbital plate of the ethmoid bone, from which the tumor was separated in wrenching it out. On the upper third of its anterior surface may be seen an indentation, corresponding to the external orifice of the suborbital canal, from which point may be measured with the eye the extent of encroachment of the tumor upwards. Its external surface projects quite prominently, and its inferior and posterior surfaces also exhibit considerable enlargement of the maxillary bone. A piece of the tumor was sliced out by sawing to its centre; and the internal structure of the mass was observed to be similar to that of the most compact bone tumor, and which is known as the ivory exostosis. Exceedingly fine sections of this piece were placed on slips of glass, and successively examined, under the microscope, after adding a drop of glycerine to each delicate section, and pressing gently its thin glass cover. Numerous osseous lacunæ with their diverging canaliculi, were seen thickly studding the little masses within the field of the instrument. These osseous lacunæ were found to be present in each specimen examined, though not so numerous in some as in others.

The tumor seems to be formed exclusively of bone tissue, and may be considered as a type of dense osseous tumors of the superior maxilla, and belongs to an interesting variety of benign growths.

Conclusions.—The growth is of a benign character. The origin of the diseased action in the bone is traceable to a contusion.

The upward extension of the tumor was peculiarly unfavorable: the mass invaded slowly the orbital cavity, and probably would ultimately have caused a protrusion of the eye and an encroachment on the brain.

My experience in this and a previous case of excision of the superior maxilla has been entirely favorable to the use of chloroform in this operation. As an excellent precautionary measure, it is well to give brandy in this, as in other surgical operations, before administering chloroform: the brandy facilitates the action of the chloroform, and materially diminishes the chances of accident resulting from the depressing effects of this agent on the nervous system.

I believe that tumors of the upper jaw of a moderate size, when favorably situated, may be excised without an external incision of the face.

The incision in the furrow of the lip and up the side of the nose, offers peculiar advantages over other incisions of the face.

The structure of the tumor will influence the amount of hæmorrhage; causing it to be more or less dangerous and difficult to control, in proportion to the vascularity of the growth.

It is best, if possible, not to stuff lint into the cavity left after the extirpation of the tumor; leaving the parts to the bland and unirritating contact of the saliva.

An excellent substitute of vulcanite and porcelain may be made to repair the deficiency caused by excision of the upper maxillary bone; and thus the skill of the dentist may essentially aid in correcting the contraction of the parts after healing.

A removal of the entire floor of the orbit does not necessarily cause a falling of the eye; such was not the case after this operation.

107 East 17th street. Old No., 56.

New Hospital in Cincinnati.—A new hospital, to be known as the Commercial, is to be erected in Cincinnati, at a cost of 500,000 dollars.

A REMARKABLE CASE

OF PENETRATING AND LACERATED WOUND OF THE ABDOMEN AND UTERUS OF A PREGNANT WOMAN,

WITH ESCAPE OF A LIVING CHILD THROUGH THE WOUND.

By E. J. MARSH, M.D.,

ASSISTANT SURGEON, UNITED STATES ARMY.

On the evening of April 5, 1867, Mrs. F., aged 42, the mother of eight children, and then in the eighth month of pregnancy, was struck in the abdomen by the horn of an enraged cow. The horn did not tear through her clothes, but she felt the child drop out, caught it in her dress, and took a few steps homeward. Here she was met by a neighbor, who assisted her to the house, distant about twelve yards from the place of accident. With this assistance Mrs. F. walked to the house, and then sat down, but the neighbors soon laid her on the floor. Her friends up to this time, supposed that the child had come *per vias naturales*, but when they lifted up the clothes they found the bowels protruding, and "reaching to the feet," as one of them stated. They cut the umbilical cord, removed the child, endeavored to replace the bowels as far as possible, covered them with a clean cloth, and left her in this condition until my arrival.

I arrived at the house about three-quarters of an hour after the accident, and found the woman lying on the floor, extremely prostrated, pale, and with a rapid and barely perceptible pulse. There was a considerable, but not excessive amount of blood, soaked into her clothes, and on the next morning blood was found on the ground where the accident occurred, and thence to the house.

I removed her to a mattress, and, on examination, found several feet of intestine and the uterus lying exposed, protruding through a wound of the abdominal wall. The womb was partially inverted through a wound in itself, and the placenta was still attached to the surface of the inverted portion. The wall of the abdomen was torn for about five inches, the wound extending from the umbilicus outwards and somewhat downwards on the left side, in an almost straight line. I returned the intestines, removed the placenta, and replaced the uterus. This organ was considerably lacerated, the wound being Y-shaped, but with one leg shorter than the other. In the contracted state, the wound was between two and three inches in length. There was but slight uterine hæmorrhage on the removal of the placenta. I then united the wound with sutures, plaster, and put on a broad bandage. She was entirely conscious, complained little of pain, but was very restless, throwing her arms about and rolling about the bed. I had given her constantly from my arrival small quantities of brandy and water, but she did not in the least rally from the shock; the pulse soon became imperceptible, and in about an hour and a half from the reception of the injury, she died.

The child was a boy, was not injured in any way, and is still living.

West Point, N. Y., April 18, 1867.

A Blessing in Disguise.—A distinguished London surgeon has taken the lecture-room to reassure the ladies in regard to the "chignon fallacy." He says the "organisms" are neither entozoa nor epizoa, but only ectozoa, which are comparatively harmless, and, indeed, aid the circulation of the blood by compelling the pleasant exercise of scratching.—*Exchange.*

THE MEDICAL USE OF ELECTRICITY.

By G. M. BEARD, M.D., and A. D. ROCKWELL, M.D.,

OF NEW YORK.

No. IV.

SYNOVITIS.

Mr. Geo. L., aged 35, stated that about the 1st of July, 1866, he was sunstruck; and between the 20th of the same month and the 15th of August, he suffered from three strokes of paralysis, resulting finally in total blindness. His sight gradually returned, but by degrees his shoulders became lame and stiff, so that he could with difficulty use them. This state of things continued until about the middle of September, when both knees and ankles commenced to enlarge. In November, when the patient applied to us for treatment, we found him suffering from severe sub-acute synovitis. Both knees were enormously swollen, the fluid having accumulated to such an extent that the patellæ projected forward more than an inch. Four applications were given, one every day, but with no marked effect, except that the lameness of the shoulders and ankles was much relieved.

He then left the city and was absent one week. On his return the improvement was found to be very great. The accumulation of fluid in the knees had almost entirely disappeared, and the swelling reduced in proportion. At first, the very strongest current from Kidder's apparatus made no impression, when applied down the spine. The legs were but little sensitive to the electric stream, and the feet and toes, which are generally very readily affected, were remarkably torpid. The applications were continued on Dec. 3d, 4th, 5th, 7th, and 9th, effectually removing this want of sensation, and completely dissipating the remaining swelling and tenderness of the knees.

PARALYSIS.

Case First.—Mrs. S. was first seen February 6, in consultation with Dr. Moreau Morris. Her history was, that about three years before she had given birth to a child, since which time she had been an invalid. She could walk only with difficulty, and by the aid of some support. A few weeks before we saw her, she had suffered an attack of what appeared to have been a rush of blood to the nervous centres, followed by increased weakness. She was of slender form, and was somewhat emaciated. She complained of persistent coldness in the feet, that at times was almost painful. Her appetite was capricious, her bowels very much constipated, and she was also annoyed with neuralgic pains in the left side. On examination, we found the muscles of both legs were inactive and shrunken, and were very slow to respond to electrical excitation. The flexors of the left leg had entirely lost their muscular contractility, and the whole limb presented an unhealthy aspect. The case appeared to be one of functional paralysis, associated with general debility. Whether this anæmic state was the result of some lesion of the nerve centre, it was manifestly difficult to determine. The indications for treatment in this case were,

1st. To improve the general condition by some effective tonic.

2d. To restore the muscular contractility and increase the blood circulation in the lower limbs.

As internal medication had been tried in vain, it was resolved to see what could be done by electricity alone, using general and local applications. During the first week of treatment the patient complained of some restlessness at night, but of no other unpleasant symptom.

From that time there has been a gradual progress. Her appetite has increased, her bowels have become more regular, and her rest at night is less disturbed. The pains in the side left her the third week of the treatment, and have returned but slightly on one or two occasions. Her muscular system throughout is somewhat firmer and harder, and consequently has very perceptibly improved in her general appearance. The circulation in her lower limbs has so far improved that she complains less of cold feet, and the color both of the right and left leg is more natural. She can walk about with greater ease and for a longer time than before, but more on account of the fact that her general vigor is greater, than from any special increase in the contractility of the affected limbs. We shall hereafter resort to the use of the continuous stream on the muscles of the lower extremities, still continuing our general tonic applications with the faradaic current. Anything like an absolute restoration in such cases is of course not to be expected.

Dr. Todd, of London, has advanced the idea first suggested by Marshall Hall, that by means of electric currents we can diagnosticate some of the different types of paralysis. His theory is that when the electro-muscular excitability of the affected part is lost, or nearly so, or is normal, we have a case of curable paralysis, caused either by lead poison, rheumatism, hysteria or exposure to cold, or by some other peripheral irritation; and when the electro-muscular excitability of the affected part is increased above the healthy standard, we have a case of incurable paralysis, connected with some persistent irritating brain lesion. These theories will, we believe, stand the test of experience.

Case Second.—W. G. was sent to us by Dr. Chalmers to be treated for anæsthesia, and partial loss of the power of motion of the thumb and fingers of the left hand. He stated that ten months previous he had suffered from swelling and pain in the left hand; that the "skin burst," and that he afterwards lost all sensation in the thumb and fingers. He was unable to grasp anything firmly.

He complained of a feeling of coldness in the affected parts, that, at times, was quite annoying. The skin was dry and shrivelled. His general health was so good that we employed only local applications, and those were as strong as he could possibly bear. Both the descending and ascending secondary currents were used, and the electrodes were applied along the course of the median nerve and its branches. The progress was slow but steady. The sensation gradually returned, and after fifteen applications was completely restored in all the parts except the tip of the second finger. He then returned to his occupation, which was that of a house-carpenter, and found that he could labor nearly as efficiently as ever. The feeling of coldness still continues to annoy him occasionally, more particularly in stormy weather.

Case Third.—Mr. C., a gentleman 60 years of age, represented that in October, 1864, he began to be affected with severe pains in his legs and feet, which were most severe at night, with alternations of heat and cold. The power of flexion and extension of the muscles of the leg gradually left him, until he could walk only with difficulty. The pain also left him, and a feeling of numbness, like that of a "foot asleep," remained, that was soon followed by entire loss of sensation. When he first came to us, Jan. 15, 1867, he could hardly raise his feet, saying that they felt "like dead weights." The loss of sensation and motion was more marked in the left foot than in the right. He was a large, well formed man, and, notwithstanding his age, appeared to be in quite vigorous health. On making the first application it was found that the muscular contractility was somewhat diminished, especially on the left leg; and the sensation was so blunted that he did not feel the entire force of the battery, even when the electrode was placed on the extremity of the toes. After four vigorous applications of the ascending and descending faradaic current (the positive pole being pressed against the ball of one foot, while the negative was applied to the other), the sensation in a good measure returned, and he found that he could flex and extend his toes with less difficulty. The same treatment, continued for a month, gave very favorable results. His gait was much more natural, and the sensation to a considerable extent returned in both feet.

Case Fourth.—Mr. S., a young man of about 30, was sent to us by Dr. Austin Flint, to be treated for paralysis of sensation of both legs, from which he had been suffering for nearly a year, caused by syphilis, as there was some reason for believing. Four or five applications were made without any observable results. The patient then left us scarcely any improved. Reasoning from analogy, it would seem that he might have been somewhat benefited by a long course of treatment.

INFANTILE PARALYSIS.

Case Fifth.—Nathan H., aged 3 years. During the month of July, 1866, the little patient was first brought for treatment. Both limbs were atrophied, the left more considerably than the right. The child was scarcely able to support his own weight. About a dozen applications were given, and with marked improvement, so far as warmth and strength of limbs were concerned. During the month of August the treatment was discontinued; but on the first of September, when the boy was again brought to continue the applications, he was able to walk alone and with comparative ease.

Case Sixth.—Benj. A., aged 3 years. His mother stated that eighteen months before (April, 1865), after suffering severely in teething, the paralysis first showed itself. For several months the child had been taken to public clinics, where cod-liver oil had been given, but with no decided improvement.

He was first brought for treatment about the 5th of September, 1866, and up to October 22, received fifteen applications of the faradaic current. When first seen, the legs were much atrophied. The circulation was deficient, and the limbs were powerless to bear the weight of the body. The improvement manifested, although very gradual, was encouraging; and it is to be regretted that the parents, who lived a considerable distance from the city, ceased to visit us. At the end of treatment, the little patient could easily stand, by the aid of a chair. The limbs had increased somewhat in size, and the warmth of both was much greater than six weeks before.

CHRONIC INFLAMMATIONS OF MUCOUS MEMBRANES.

Having always been taught that electricity was not good for inflammations, we were only convinced of the error of the theory by repeated observations of its beneficial effects on persons affected with catarrh and bronchitis, and ulceration of the membrana tympani.

We find that electricity is a powerful adjuvant in the treatment of all chronic inflammations of the pharynx, larynx, and nasal passages, both for its general tonic influence, and for its local corrective power. It allays the irritation caused by the application of nitrate of silver, and those upon whom we have employed it for this purpose, desire to have it repeated. Electricity has been long used in diseases of the ear with various

success. It is now known to all aurists that deafness, in the majority of cases, is a symptom of some form of inflammation of the auditory apparatus. It is therefore logical to infer that electricity would be of value in the treatment of such maladies, and so we have found it in a number of cases.

Case First.—Elisha L., aged 17. When five years of age he was attacked with scarlatina. A few weeks after recovery he was pulled violently by both ears, since which time he had been very deaf, and could with difficulty be made to hear when spoken to in a boisterous tone of voice. We first saw him Jan. 24, 1867, when he could hear the tick of a watch only when it was pressed firmly against the ear. The membranæ tympani were somewhat thickened, and there were evidences of inflammation in the right external auditory canal. For the sake of experiment, we concluded to test the effects of electricity, directing the patient to place his hands on the piece of copper to which the negative pole was attached, and applying the positive below and anterior to the auricle. At the close of the operation he could hear the watch four inches on each side. On the next visit we found that he retained all that he had gained, and could hear conversation much easier than at first. We then inflated the tympanic cavities by Politzer's apparatus, with the result of increasing the hearing-distance two inches on each side. We had intentionally delayed this very important operation in order to see first what might be accomplished by electricity alone. The tubes were readily permeable. The patient shortly after left the city, and we have had no information in regard to his subsequent progress.

In cases of ulceration of the membrana tympani and chronic inflammation of the middle ear, accompanied by offensive discharge, and associated with deficient vital force, we have found that general tonic applications wonderfully assist the local treatment of syringing and astringents. Of those patients whom we treat for pharyngitis and ulceration of the membrana tympani, those upon whom we employ electricity as an adjuvant seem to progress more rapidly and more satisfactorily than those upon whom we do not; and so marked is the difference in the results that we now rarely treat such cases for any length of time without resorting either to general or local applications.

Case Second.—George B., of Conn., a lad of 14, when ten years old had suffered from the measles, that had left him with ulceration of the membrana tympani, and inflammation of the middle ear on the left side, attended with abundant and offensive discharge. A few months before he called upon us the right ear had also commenced to discharge, and some alarming symptoms of vertigo began to manifest themselves. The pharynx was affected with follicular inflammation, as usually obtains in such cases, and an annoying, persistent cough made his friends apprehensive of tuberculosis. His appetite was capricious, his muscles flabby, and his general condition below par.

Examination by the mirror and speculum revealed the absence of the left drum, and a small perforation on the inferior portion of the right. The hearing distance of the left ear was three inches; of the right, two feet. The eustachian tubes were pervious.

Dr. D. B. St. John Roosa afterwards saw the case in consultation, and confirmed the somewhat unfavorable prognosis that we felt compelled to give. It should be stated, moreover, that the lad had been treated for his difficulty by various physicians. At one time he submitted to constant blistering over the mastoid process, for several months. We decided to employ both general and local treatment. The ears were ordered to be syringed with lukewarm water every night, after which a solution of sulphate of zinc (grs. iv. to ʒ j.) was to be dropped in and retained for a few minutes, while the patient inflated the tympanic cavities by closing the mouth and nostrils and blowing vigorously. He visited us over a week regularly, at which times we usually treated his pharynx by applications of a solution of nitrate of silver, of moderate strength, or by a solution of permanganate of potash, and inflated and cleansed the tympanic cavities by Politzer's apparatus. There was immediate temporary improvement of the hearing; but for the first month there was no perceptible diminution of the discharge. We then began to make use of general applications of the descending faradaic current over the whole body, and particularly below and anterior to each auricle, pressing the fingers firmly against the skin. It was not long before good effects were manifest, so far as his general health was concerned, although the condition of his ears improved but slightly. Whereas, at first, he was much fatigued by the mere exertion of coming to the city and visiting the office, he could now join with alacrity in the vigorous sports of his companions. By the 1st of February, 1867, the attacks of vertigo became very unfrequent, the appetite had increased in sharpness, the sleep was sound and undisturbed, the pharyngeal inflammation and the vexatious cough had entirely disappeared, and he had gained several pounds in flesh. We now added the internal administration of iron to the other remedies; but continued on with the use of the ear-drops, and the general applications of electricity. By the 1st of March the discharge from the right ear had entirely ceased, and in the left had greatly subsided. Calcined magnesia, blown in a few times against the inflamed surface, at this time seemed to operate favorably, and the patient was directed to come occasionally for general applications, mostly discontinuing the local treatment. The hearing distance had increased on the right side one foot, and on the left two feet. In this case the agents employed to combat the local inflammation and general debility were so numerous and so varied, that it is impossible to determine with accuracy just how far the amelioration was due to the application of electricity. But as little or no progress was made while mere local treatment was employed, and inasmuch as after we began the tonic applications all unpleasant accompanying symptoms—the barking cough, the irritation in the throat, vertigo, and general weakness—disappeared, we naturally infer that the electricity was a very important if not indispensable adjuvant to the other remedies.

Case Third.—Mr. L., a clergyman from Brooklyn, came to us Dec. 15, 1866, complaining of a throat difficulty of fifteen years' standing that at times had made it very difficult for him to fulfil his duties in the pulpit. Occasionally he had been compelled to rest entirely, for a considerable interval, from all public speaking. He complained of a feeling of heat and dryness in the throat, and of continued hoarseness, that increased at times so that he could only speak in a whisper, and also of a very annoying and persistent cough. His pharynx was so exceedingly irritable that we found it very difficult at first to make a satisfactory laryngoscopic examination; but this sensitiveness was in a measure overcome by perseverance, and we were enabled to gain the vocal cords, and inspect the upper portion of the trachea. We found the entire mucous membrane of the pharynx and larynx affected with follicular inflammation. The secretion was abundant, especially in the vicinity of the vocal cords. Physical

examination of the lungs convinced us that his cough was mainly the result of chronic bronchitis, and, as his general health was excellent, we decided to employ local applications of nitrate of silver, and to make use of inhalations, giving no constitutional treatment whatever. He visited us two or three times a week, and soon began to improve slightly; but as we were not satisfied with the progress he made, we employed local applications of electricity. The results were unexpected. Not only were the irritating effects of the applications of nitrate of silver temporarily relieved, but permanently beneficial results seemed to follow at once, both for the throat affection, and more especially for the cough, which all along had been one of his most distressing symptoms. When he discontinued the treatment the cough had almost entirely disappeared, and the inflammation of the larynx was in a good degree subdued. His vocal cords also were stronger; but we advised him to rest for a while from his public labors, in order to avoid the danger of any relapse.

914 Broadway.

Original Lectures.

OPERATION FOR HARE-LIP,

WITH REMARKS

By PROF. FRANK H. HAMILTON, M.D.,

BEFORE THE CLASS OF '65—'66 OF

BELLEVUE HOSPITAL MEDICAL COLLEGE.

Gentlemen:—We bring before you to-day a child, six days old, having single hare-lip, complicated with fissure of the palate. Hare-lip, or Labium Leporinum, as it is technically termed, is so called from its resemblance to the upper lip of the hare. There are two principal forms of hare-lip, namely, simple and complicated. By simple hare-lip we mean that in which there is a fissure in the lip only; by a complicated hare-lip we mean that in which there is a fissure in the lip, and also a fissure, more or less extensive, in the roof of the mouth, or in the alveolar arcade. The simple hare-lip may be either single or double; that is, it may exist on one side, or upon both. The complicated forms of hare-lip also admit of division into several varieties, but which we will not stop now to describe particularly.

Hare-lip is a congenital affection, and is the result of an arrest of development. The upper lip being formed from three points, viz. a central, and two lateral points, the arrest of development necessarily results in the formation of a fissure upon one side, or upon both.

My mode of procedure in operating for hare-lip differs somewhat from that usually practised; and in order that you may understand the value of my experience upon this subject I have thought it proper to bring before you a tabulated statement of most of the cases upon which I have made operations in the course of my life; which have been compiled by a very intelligent young friend of mine, Dr. Thayer. He has taken them from my various note-books, and from the published accounts of my clinics, and has arranged them in a convenient form for reference. The number which he has thus tabulated is forty-four (excluding two, which he has very rightly rejected as not being properly cases of hare-lip). I have been able to find in addition five cases, so that this operation will constitute the fiftieth which I have made for hare-lip. But the analysis which I offer you of my cases is based upon these forty-nine, which are here tabulated.

In the first place I have to say that but three times in all of the cases upon which I have made the operation, have I failed to make the lip unite; one of these was the first case in which I ever made the operation for hare-lip, and in which I committed the double mistake of employing hare-lip pins, and committing the patient subsequently to the charge of another person for treatment. It is an established maxim with me now never to undertake an operation for hare-lip, unless I can have the case under my own treatment subsequently; believing that in a branch of surgery, in which so much depends upon minute detail both in regard to the operation and the subsequent dressings, the operator neither does justice to himself nor to his patient, who submits the case subsequently to the care of less experienced persons. Indeed, I would apply this rule, with few exceptions, to the practice of any department of surgery, which is insomuch an art that it can only be acquired and practised skilfully by those who have often repeated the same manipulation. When I made my first operation for hare-lip I had heard the remarks of Roux, the great French surgeon, who had declared that two successful results out of every three operations were all that could be ordinarily expected. My experience does not confirm the accuracy of this statement. I shall presently describe to you, with considerable minuteness, my own method, which, it will be observed, is exceedingly simple, both as regards the mode of procedure and the instruments employed.

The first question which would naturally arise in this connexion would be at what period of life is it proper or best to make the operation? I reply in general terms, other things being equal, the earlier it is made the better; for the reason, first, that the earlier the operation is made the less the child will have to dread; second, the earlier the operation is made, in my opinion, the less the patient will actually suffer from the operation; third, the more prompt will be the union; fourth, the more perfect will be the configuration of the lip in subsequent life; fifth, if it is a complicated hare-lip, with fissure of the alveoli, or of the roof of the mouth, the earlier the operation is made, the more closely the sides of this long fissure will eventually approximate: and finally, the earlier it is made the more sure we are of avoiding those future contingencies which from time to time may arise, and which may render a final and complete deferring of the operation necessary. For example, if the child is in complete health at the period of birth, we cannot be sure that it will be in equal health again at any subsequent period. If the child is free from eruptive affections, we cannot be sure that such eruptive affections may not at any moment develop; which eruptions I regard as in themselves constituting a sufficient ground for deferring the operation. Third, we shall have to omit to make the operation during the heat of the summer; it having been my experience that operations of this kind, made upon infants or young children in summer, are exceedingly liable to prove fatal, owing to the fact that at this season of the year all infants are prone to affections of the alimentary canal; and if we add to the proneness to diarrhœal affections induced by season, the provocation of an operation, the danger from this cause becomes not inconsiderable. Fourth, it is not, in my judgment, proper to operate during the period of teething; and if we delay the operation until after teething has commenced and terminated, then various circumstances may, and are very likely to interpose to prevent the completion of the operation at any subsequent period; moreover, by the delay we have deprived ourselves of the advantages which have already been mentioned as belonging to the operation made in early infancy. I have not had an opportunity of making an operation on the

first day after the birth of the child; yet I would not hesitate to do so, if the case were presented, and the condition of the child, with the season of the year, were favorable. The earliest operation which I have made, up to this moment, has been on the tenth day: and from this period I have operated on all ages up to thirty-five years of life. Ten days, it was said some years ago, was the youngest age at which the operation for hare-lip had been performed at King's College Hospital in London. Dr. Friedberg has operated three hours after birth, ten hours after birth, and fourteen hours after birth; Bateman has operated four hours after birth; Dawson has operated seven hours after birth; Malgaigne at nine hours; Dubois and Guersant also performed early operations.

I will now proceed to describe, with more particularity, my own method of operating. I employ in this operation no instruments but a common bistoury, a very heavy and strong-bladed, sharp pair of scissors, so constructed as that they will not yield, and thus compress without cutting the tissues, and a common straight surgeon's needle, or one slightly curved at the point. I employ also harness-maker's silk, or the ordinary surgeon's silk, of large size, as a suture. Hare-lip pins, introduced by Ambrose Parè, and generally employed by surgeons, from his time down to the present period, I have never used since my first operation, which I have described as a failure. I find no good argument for their use; on the contrary, I find plenty of substantial arguments against their use, and I have come to regard them as a relic of barbarism. In addition to the sutures I employ also common adhesive plaster, in a manner which I will hereafter describe.

In regard to the use of anæsthetics in this operation, I may say that I have occasionally employed them, and I have not seen from them any ill effects. Infants pass under the influence of the anæsthetic promptly, and its immediate and final effect upon the circulation is less marked than is the case with adults. Nor do I know of an authenticated example in which the life of an infant has been destroyed, either directly or indirectly, by the use of ether or chloroform. But inasmuch as the patients do not suffer from apprehension in prospect of the operation, and the operation can be quickly made, and is not apparently an exceedingly painful one, rather for the purpose of saving time than otherwise, I have usually, even since the introduction of anæsthetics, omitted to give them. I will, however, in this case put the patient moderately under the influence of ether before proceeding to the operation.

(This was done, the patient not being completely insensible, and Dr. Hamilton then proceeded to make the operation, adding the following description.)

I seize the lip upon the side—if it is a single fissure, as in this instance—on which the fissure exists; dissect up the attachment of the lip to the gums, and pursue the dissection until I have completely elevated the ala of the nose upon that side, which is always greatly displaced; and without this precaution it will be more difficult to bring the lips together, and the ala of the nose will remain permanently displaced. I then proceed to the opposite side and dissect rapidly the slight attachments of the margin of the lip to the gums in this direction also. I now seize one margin of the lip between the thumb and finger of my left hand, and with my strong and sharp scissors, I cut away a straight ribbon, carrying the scissors well up into the ala of the nose, if the fissure extends so far. I then seize the opposite side in the same manner, and remove a ribbon from the margin of the fissure in the same manner. My purpose always is, to *remove enough*, so as to make the surfaces which are to be brought into apposition as broad as possible. I remember once to have witnessed an operation for vesico-vaginal fistula, made by that distinguished surgeon, Dr. Simms. And when he had completed his operation, I said to him, "Doctor, I have discovered the great secret of your success in operating for vesico-vaginal fistula. It is, I think, first, in making a very broad and free incision of the margins of the fissure; second, in introducing your sutures far from the edge." The Doctor acknowledged that this constituted the great part of the source of his success.

I never use a bistoury for the purpose of cutting the edge of the fissure; for the reason that, however sharp it may be, it is almost impossible to make the line of incision straight; and it is difficult to secure the requisite breadth of surface. Nor do I deem it necessary to use any of those curiously constructed forceps which are employed by some surgeons, for the purpose of seizing the lip and indicating the direction in which the incision shall be made.

If, at this moment, the coronary artery springs with a vigorous jet, I direct the assistants to seize upon the upper lip on either side of the fissure, and hold it firmly until I am able to introduce my sutures. I introduce my first suture at the point of junction of the vermilion border of the lip with the skin, and pass it directly through to the interior surface of the mouth; the same point of junction of the vermilion border with the skin upon the opposite side, indicates the point at which the needle must emerge in this direction. I introduce this lower suture first, in order that I may bring the lower margins of the lip together for a moment, and be able to determine precisely at what point upon the opposing surfaces of the fissure the next suture should be passed. The second suture—and it is seldom that I use more than two, unless it is in adults—I introduce, close to the ala of the nose on the side of the face on which the fissure exists; and bring it out on the opposite side at such a point as has been determined by the immediately preceding measurement, is proper. Both of these sutures are introduced far from the edge. In a child of this age I introduce them at least a quarter of an inch from the edge. If the fissure was very wide, I would introduce them half an inch from the edge. And in children who are older, in whom the skin is less extensile, it is my general practice to introduce the suture half an inch from the freshened margins of the fissure. I now close the upper suture first, this part of the fissure requiring the least strain, and bring the opposing surfaces in apposition, and tie with an ordinary surgeon's knot, snugly. I then close the lower suture in a similar manner. Whatever hæmorrhage has occurred from the coronary vessels, now immediately ceases, the tightness of the sutures being always adequate to arrest the hæmorrhage in these vessels. I do not now apply, as some have recommended, a small delicate suture to the free vermilion border of the lip, for the purpose of avoiding the slight indentation at this point, which occasionally occurs after the completion of the operation, finding that the suture passing through the free vermilion border holds upon tissues which are so exceedingly frail and delicate that it scarcely ever fails to work its way out in the course of a few hours, or a few days at most, after the operation is made. I have used this suture a few times, but it serves no useful purpose. Now the operation is completed by placing across the upper lip from one side of the face to the opposite, strong bands of adhesive plaster, drawing the lips together with as much firmness as possible; so, indeed, as to corrugate the mouth into a very unseemly shape. The object of these adhesive plasters is to take off at once all strain, as far as possible, which has been resting upon the sutures; and to leave to the adhesive plasters

rather than to the sutures, the task of supporting the lips; the sutures serving the purpose, mainly, of keeping a more accurate adjustment of the margins of the fissure, and standing as a "reserve" in case the adhesive plaster should give way. These adhesive plasters should be broad upon the surface of the cheek, and comparatively narrow as they cross the upper lip. It is not necessary to retain them in place by bandages, or compresses, ordinarily. When these plasters are thus applied, I add two or three narrow strips of adhesive plaster upon the lower portion of the upper lip, for another purpose. I have observed that if the lower margin of the lip is not covered by the adhesive plaster, it becomes dry, soon swells, rolls out, and cracks open, and the process of union is defeated at this point. While, if it is covered in by the adhesive plaster—the plaster imbricating the lower margin of the lip to the extent of from a quarter to half an inch, it serves to compress the lower part of the lip and to prevent its swelling out; it keeps it in a state of moisture, which is more favorable to the reduction of inflammatory action; and what is of equal importance, it protects the lip from the spoon employed by the nurse in feeding the child.

In the further treatment of this case, it is my practice to see the patient, if possible, twice daily, morning and night. If I find that the plasters have slipped a little upon the face, or have become moistened, through the carelessness of the nurse in feeding the patient, and thus have been permitted to stretch, I direct the assistant to stand behind the head of the patient, and to press the cheeks forward well, while I cut the centre of one or more of the straps, remove them from one side and the other, and substitute for them fresh straps, paying no regard to the fact that the straps which remain may be thus more or less doubled up into folds across the top of the lip, for these are certain to be moist and soft, and make no painful pressure. At this point it may be well to add that, in order to diminish the chance of the plasters' stretching, when they have become moistened, the plaster should be cut in the direction of the warp, and not the woof, that is, in the long direction of the sheet. I wish also to add, that I have used the isinglass plaster, and other plasters, and I do not find any of them suit my purpose so well for this operation, as the common diachylon plaster.

If, within twelve to twenty-four hours after my first dressing, I observe any accumulation of milk, or of sordes of any kind, upon the surface of the lip, in the vicinity of the wound, I take pains to remove it carefully with a soft sponge, moistened with tepid water—the water containing a little castile-soap. This I do because I have observed that a great degree of the success in this operation depends on keeping the lip constantly so well cleaned, and free from excoriating material, as that no abrasions occur to interfere with the process of cicatrization. It is one of the most important means, also, in the prevention of erysipelas.

At each subsequent observation of the case, I readjust or renew more or less of the plasters, according as the exigencies of the case may seem to demand; and I never fail to observe again the condition of the wound as to cleanliness, nor, after the lapse of the second or third day, do I fail to note particularly the condition of the points at which the sutures have passed through the flesh; and if I observe anything like an appearance of ulceration, or of giving way, I not only cleanse it thoroughly with tepid water and soap, but I apply to it a weak solution of nitrate of silver, say gr. i. to 3 ij. water. If, on the second or third day, I observe that considerable inflammatory action, with more or less ulcerative action, has ensued, I may deem it advisable, as I have done in a *few* cases, to remove the sutures, and depend entirely upon the adhesive plasters. I wish it to be distinctly understood, however, that it is my general practice, now, to leave the sutures until the fifth, sixth, or seventh day; regarding them as important means of reserve, if, by any accident, the adhesive plasters should become suddenly loosened. I do not find that the little wounds, which are made in the flesh by the sutures, leave any permanent marks, if the operation is made early in life. This practice of renewing the adhesive plasters, I continue from day to day, for two or three weeks, and then they may be left off with safety. It will be seen that the employment of silver wire, or any metallic suture, in this mode of operating, would be attended with certain inconveniences, the ends of the wires being subjected to the pressure of the adhesive plasters; and as I have been sufficiently successful with silk sutures, and they are not liable to this particular objection, I see no reason why I should substitute anything for them.

When I say that of forty-nine cases, forty-six have united, I do not wish it to be understood that in all the cases the margins of the lip have united to the whole extent of the surfaces which have been made raw. In some few instances, the margins have given way above, within the alæ of the nostrils; but this has occurred particularly, I think, when the operation has been made late in life, the tissues then being less extensile, and when I have omitted to dissect up sufficiently freely the ala of the nose, upon that side upon which the fissure existed. These exceptions, however, have occurred only occasionally in the course of my practice. It has sometimes also happened that the lip has failed to unite, completely, at its lower margin, particularly on its vermilion border, and a slight fissure, or depression, has been the consequence; which I believe, however, when the operation has been performed early, has been overcome by the lapse of time; certainly it has in all those cases in which I have been permitted to see the patient after several years. But I know of no method by which this latter accident, viz. the giving way of the lower margin of the lip, can be more effectually avoided, than by my own—whether that method consists in the peculiar mode of incision upon the lower border, or in the addition of the supplementary stitch upon this border. I have tried them myself, and have seen them tried by others, and I prefer my own plan. It must not be forgotten that the lower stitch must be introduced precisely at the point of junction of the vermilion border with the integument. And it must not be forgotten that to secure it still further against giving way at this point, the protection afforded by the adhesive plaster is absolutely essential.

During the progress of the operation, and in the after treatment of the case, it is my custom to submit the child to no further confinement than is made by withdrawing the arms from the sleeves of the dress, placing them within the waist of the dress, and then putting the belt around the waist. This gives the child a certain freedom of motion of the hands, while it does not enable it to reach the face.

I have further to remark, that when I speak of the extraordinary success of my operation, I only refer to the matter of union of the opposing surfaces of the lip. Death has occurred from the operation in a certain number of cases, the precise number I am not now prepared to state; but in no instance has this taken place until after the union has been completed. It is certain, therefore, that none of these children have died of the immediate shock of the operation, since none have died earlier than the eighth or tenth day. None have died from the loss of blood. In those cases which I can now recollect, without reference to my tables, in which death has

taken place clearly traceable to the operation, the children have died either from diarrhœal affections, or, as in one instance, from an erysipelatous inflammation, which supervened as late as the fourteenth day. It must be remembered, also, that the majority of these infants are not robust. The very fact of an arrest of development, in my judgment, usually argues some constitutional defect, yet not invariably. In following, therefore, the histories of these children, I am not surprised to find that not many of them have survived to adult life.

I cannot now consider the double hare-lip of a simple character, or that in which the fissure does not extend through the alveoli; nor can I consider at this time the treatment which would be applicable to the various complications. My remarks have been based entirely upon the example of single hare-lip, which is now presented to you. It is true, however, that to a very great extent, the modes of procedure which have here been adopted, I have found applicable to all the varieties of double and complicated hare-lip. But of these, we shall have to speak at some future time.

The reporter has made the following analysis of these tables:

Of single and uncomplicated hare-lip operations, the number is 17; of single and complicated, the number is 22; of double and complicated, the number is 11. Total, 50, including the operation which has just been made. Averaged according to the ages they are as follows:

Age.	Single and uncomplicated.	Single and complicated.	Double and complicated.	Total.
From 7 days to 1 month.	None.	4	1	5
1 to 3 months	4	7	2	13
3 to 6 months	3	5	3	11
6 months to 1 year	2	1	2	5
1 to 2 years	None.	2	2	4
Over 2 years	7	3	2	12

Cases in which incision failed to unite:

Case 23: Child 2 months old; single and complicated. Operation made with hare-lip pins, and child left in the hands of another surgeon.

Case 35: Single and complicated; child 22 days old. The mother, an Irishwoman, living in a shanty; did not return to Dr. Hamilton until the fifth day after the operation, when the adhesive plasters were found to have become entirely loosened.

Case 32: Single and not complicated; feeble child, 7 months old. Incised the edges of the fissure with a bistoury, and did not leave a sufficiently wide margin for adhesion. Union had taken place on the fourth day; after which the child rapidly sank from diarrhœa, and died on the tenth day, the union which had occurred having given away through half its extent by the eighth day.

Of those who died, apparently directly or indirectly in consequence of the operation, the first was a child five months old, the operation having been made in midsummer. The child died on the eighth day, of diarrhœa and prostration. In the second case, the child was three months old; the operation was made again in midsummer; erysipelas, diarrhœa, and a general wasting supervened, and death occurred at the end of five weeks. The third case was a double complicated hare-lip, in child four weeks old; died at the end of two weeks of diarrhœa and general marasmus. The fourth case was of double complicated hare-lip, in a child five weeks and five days old; died on the fifteenth day, of general marasmus. The fifth case was single and not complicated; child seven months old; died on the tenth day, from exhaustion. This is case thirty-two, already mentioned as an example of partial failure.

Reports of Hospitals.

LONG ISLAND COLLEGE HOSPITAL.

A SERIES OF CASES ILLUSTRATING CARDIAC DISEASE.

SELECTED FROM PROF. FLINT'S CLINICS.

(Reported by O. C. SPARROW, M.D., Clinical Assistant to the Chair of Practical Medicine and Pathology.)

CASE II.—*Aortic Valvular Lesions: Mitral Direct Murmur implying no Lesions of the Mitral Valve.*

History.—Bridget P., æt. 46 years, a domestic, was admitted to hospital while suffering from intermitttent fever. She states that fifteen years ago she experienced a severe attack of articular rheumatism, involving most of the larger joints of the body; was confined to the bed for several weeks. She has not had an acute attack since, but frequently experiences rheumatic pains in different parts of her body. She complains of no urgent symptoms referable to the heart.

Physical Examination of Heart.—The impulse of the apex beat is in the fifth intercostal space, on a vertical line passing through the nipple. There is moderate enlargement of the organ, with evidence of predominant hypertrophy. On applying the stethoscope an aortic direct and aortic regurgitant murmur is heard. The latter has its maximum of intensity over the body of the organ. Over a circumscribed space near the apex, a feeble mitral direct murmur is distinctly appreciable.

Comments.—The chief point of interest belonging to this case relates to the occurrence of a mitral direct murmur, associated with aortic valvular lesions. This murmur has not unfrequently been observed in this connexion during life, in cases in which a post-mortem examination revealed no lesions of the mitral valve. Dr. Flint offered the following original explanation, which seems adequate to account for its occurrence under these circumstances: Following immediately upon the diastole of the ventricle, the regurgitant stream of blood begins to enter the cavity of the ventricle from the aorta, and since the systole of the auricle precedes by a brief interval that of the ventricle, the blood is also slowly trickling down, by force of gravity, through the auriculo-ventricular orifice. When, therefore, the auricle comes to contract, finding the cavity of the ventricle already partly filled, and the curtains of the mitral valve floating out loosely in the blood, they are thrown into a state of vibration, which produces the murmur. This explanation is rendered still further probable by observing the effect produced upon the curtains of the valve, by injecting water through the mitral orifice into the ventricle. They first float out loosely upon its surface, and are finally closed, when the cavity becomes filled.

CASE III.—*Valvular Lesions: Subacute Pneumonitis, Albuminuria.*

May 24.—*History.*—James Clohan, æt. 38 years. He dates back his illness three weeks. Supposes that he contracted a cold; had an annoying cough and expectoration; sputa sometimes streaked with blood. At the end of a week these symptoms had nearly subsided; when, without any apparent cause, the cough became much increased, accompanied by rusty sputa. Suffered lancinating pain in the side, which was most severe at the close of a deep inspiration. Felt chilly sensations. No marked febrile movement. His appetite has continued fair. Bowels regular. Has not been

confined to the bed. Never had articular rheumatism. Has suffered some deficiency of breath on exercise for several years.

Physical Examination.—Lungs.—Slight dulness over the posterior lobe of the right lung. Crepitant and subcrepitant râles. Exaggerated vocal and whispering resonance. Some subcrepitant râles are also heard on the left side, more marked behind than in front.

Heart.—The impulse of the apex beat occupies its normal situation. No enlargement exists. He presents two pretty loud murmurs, viz. mitral direct and aortic direct.

Urine.—This has a smoky color, and contains a considerable quantity of albumen. No microscopical examination was made.

℞. Syr. papaveris f ℥ ij.
S. Teaspoonful every five hours.

June 5.—Patient reports that since his last visit at the clinic he has had dropsy. This has chiefly disappeared, but there is slight pitting of the skin over the sternum and legs. His limbs have at times been œdematous before. The urine has a better color, but still contains albumen. His cough continues troublesome, and he complains that his appetite is becoming poor. Physical examination of the chest reveals about the same condition as at last visit.

℞. Potassii iodidi ʒ ij.
Tinct. gentianæ comp. f ℥ ij.
Syr. papaveris f ℥ i.
Aquæ puræ f ℥ j. M.
Sig. Teaspoonful every six hours.

Patient did not again return.

Comments.—We have already seen that valvular lesions, and most of all, mitral obstructive lesions, tend directly to induce congestion of the lungs, accompanied by various symptomatic events, as cough, dyspnœa, etc. This congestion predisposes to bronchitis, and even pneumonitis. Idiopathic bronchitis has little or no tendency to eventuate in the latter. In this case the effects of the obstructive lesions have obviously been propagated beyond the pulmonary organs, to the right side of the heart; reaching even to the systemic venous circulation. The venous trunks and branches, owing to the retarded flow of blood, have become engorged and distended, until, by a process of mere mechanical transudation, a portion of the blood serum has escaped through the coats of the vessels; and hence the dropsy. A point of special interest in this case relates to the albuminuria. In cases presenting cardiac dropsy, it is not uncommon for the urine to contain a trace of albumen, without implying the existence of any degenerative affection of the kidneys.

Instances, however, of the existence of genuine Bright's disease with organic affections of the heart, have been observed so frequently as to lead to the opinion that they sustain a causative relation to each other.

Assuming this to be true, the question arises—Which is the primary affection? The anatomical relations of the kidneys render them especially liable to passive congestion by obstructive lesions of the cardiac valves. Now, whether congestion thus occurring be sufficient to induce organic disease of the kidneys, or, on the other hand, whether the uræmic condition of the blood, incident to Bright's disease, by primarily determining endocarditis or pericarditis, may thus lay the foundation for the organic cardiac affection, are points which cannot be regarded as yet settled. It is not improbable that, in this case, the renal disease has contributed to produce the dropsy.

Progress of Medical Science.

INTERNAL STRANGULATION OF THE BOWEL BY A BAND, ASSOCIATED WITH A REDUCIBLE HERNIA, SUCCESSFULLY TREATED BY OPERATION.—Thomas Bryant, F.R.C.S., Assistant-Surgeon to Guy's Hospital, reports a case with the above caption in the *Lancet*. It was that of a gentleman, aged fifty-one, who had been ill for several days with symptoms of intestinal obstruction. The patient had been the subject of an inguinal hernia on the *right* side for twenty-five years, for which he had worn a truss; during that period the bowels had come down on several occasions, but it had only given pain on one—some six months previously. On the morning of December 28th, during the exertion of dragging up a tree, the hernia partially descended, but it was at once readily returned on the application of the hand; vomiting, however, soon appeared, and pain situated on the *right* side of the umbilicus. These symptoms continuing on the 29th and 30th, and increasing in severity, Dr. Wilkinson was sent for. A careful examination was then made, but no hernia was found; there was a large opening into the abdomen, but no swelling nor pain, even on deep pressure being made. On Dec. 31st (the third day) the symptoms becoming more severe, vomiting being fæcal, Dr. Wilkinson, who saw the necessity for an operation, called in the assistance of the author. The seat of the hernia was then examined, but no indications of anything wrong in these parts could be made out, yet marked symptoms of intestinal strangulation existed; pain in the abdomen was very severe; it was situated to the right of the umbilicus, and paroxysmal. Under those circumstances an exploratory operation in the region of the hernia was proposed, and power given by the patient to do whatever might be deemed the best. Chloroform was given, and the ring of the direct inguinal hernia exposed; no signs, however, of any strangulation of the bowel by the parts concerned in the hernia could be made out. A piece of omentum existed in the hernial sac, but no bowel. The finger could also be readily passed into the abdomen, and the neck of the sac was perfectly free. The bowel which came into view was, however, clearly strangulated, for it was of a bright cherry color, and œdematous. Under these circumstances the ring was enlarged upwards and the strangulated bowel drawn down; the finger of the author's right hand was then passed along the bowel, used as a guide, upwards into the abdomen towards the point of fixed pain. When it had been passed as far as it could go, and as much traction had been put upon the bowel as was deemed justifiable, a tight band was clearly felt. The abdominal incision was then enlarged, and the band, which was made tense by the finger, was carefully divided by a pair of scissors passed into the belly, its points being well pressed into the pulpy portion of the finger till the band was reached. The wound was then closed. On the third day the bowels acted naturally, and a rapid convalescence followed.

TREATMENT OF QUINSY SORE THROAT.—The *London Lancet* publishes an interesting report of the treatment of tonsillitis, adopted by physicians at the several metropolitan hospitals, from which we make a few extracts.—Dr. Anstie, Westminster Hospital, believes that in the suppuration variety two remedies only are of real value. If the case be seen early—i.e. within forty-eight hours of the occurrence of decided pain, before the swelling has become definite in form, and more especially if there has been no shivering and the febrile action is but slight, the application of strong local astringents is

almost certainly curative. The rough way of using this treatment is to order the patient to gargle every half hour with a solution of alum—twenty grains to the ounce. A more precise and effective use of the same astringent can be made by throwing such a solution, in the pulverised form, against the affected part. Another effective mode of local adstriction is the application of tincture of sesquichloride of iron on a sponge carried by a whalebone, which may be firmly pressed against the part. The other remedy besides local adstriction is the use, in suitable cases, of purgative medicine. If (and only in this case) there is reason to think the bowels are loaded, a brisk purge of any kind which does not produce exhausting serous exhalation will frequently give great and speedy relief.

If the disease has plainly gone on to the formation of pus, the above remedies are useless, and will only worry the patient. Our attention should then be directed, Dr. Anstie believes, to soothe pain, and to keep the swelling within bounds, while we also support the patient's strength. Hot fomentations and poultices should be applied around the throat, the patient should gently inhale the steam of boiling water, and he should be given strong beef-tea and small quantities of wine or brandy every four hours. In nine cases out of ten the pus may be left to find a natural opening, and only the occurrence of serious mechanical dyspnœa, or the appearance of a tendency to spreading of the suppuration, should induce us to use the lancet.

Dr. Wilson Fox (University College Hospital) treats ordinary cases of tonsillitis which present themselves within the first forty-eight hours of the invasion of the disease with a brisk mercurial cathartic, followed by a saline aperient draught. In cases which have even run a course of three or four days, the same plan is found by him to be beneficial, if the bowels have not been previously acted upon. Even in the early stages, unless the use of gargles gives much pain, he employs the following formula for this purpose:—Chlorate of potash, three drachms; nitrate of potash, half an ounce; glycerine, half an ounce; water, eight ounces. When seen early, this course is, in his experience, almost invariably sufficient to cut short the disease in a few days' time; and he scarcely recollects an instance where it has been adopted in which abscess has ensued. In cases of very severe swelling, he has occasionally found scarification useful; but he regards these as quite exceptional. If ulceration supervenes, either upon the tonsils or on the fauces, the solution of nitrate of silver, of the strength of fifteen grains to the ounce, is, in his opinion, the best remedy; and it may be advantageously applied to the tonsils, when suppuration is not present, in cases where the swelling lasts longer than five or six days. Dr. Fox strongly deprecates the use of the solid nitrate of silver in the early stages of the disease.

Dr. Clapton (St. Thomas's Hospital) recommends the usual depletory remedies, but objects to stimulating gargles in the early stages. When a patient has been the subject of repeated attacks of acute quinsy ending in suppuration, the plan of applying a liniment of thin extract of belladonna just below and behind the ramus of the jaw has been found a most excellent one, rapidly relieving the pain and intense irritation, and in some instances cutting short the progress of the disease almost at once.

In incipient sore throat, of whatever kind, Dr. Broadbent (St. Mary's Hospital) has for some time given small fragments of guaiacum resin—a piece to be kept in the mouth till dissolved, three or four times a day. The good effects have been very evident, more particularly in superficial inflammation of the mucous membrane; but tonsillitis has apparently been arrested, and in patients subject to quinsy attacks have been averted.

Dr. Headland (Charing-Cross Hospital) relies greatly upon chlorate of potash as a gargle and mild magnesian purges. None of the physicians think it necessary, except in extreme cases, to use the lancet.

Hereditary Predisposition in Phthisis.—As a general thing, pulmonary tuberculosis is more frequently transmitted to the younger than the older children of the family, and more commonly to the females than the males. In a table compiled from the Brompton Hospital Reports, London, I find that in one hundred cases of phthisis, the disease is transmitted by the father four times, and by the mother thirteen times. The reason for this may be found in the fact, that the females are more exposed to the same inducing causes as their maternal parent. I have known several families where the disease was confined exclusively to the females—the mother and daughters perishing with it, while the father and sons were exempt. We sometimes witness the same thing in cancer. I am acquainted with the history of a family, where for three generations nearly every female died with the malady, while there was not an example among the males.—*Dr. Dutcher, Med. and Surg. Reporter.*

A Diagnostic and Prognostic in Typhoid Fever.—The attention of Dr. E. H. Watts, of Gainesville, Ala. (Med. and Surg. Reporter), was, during 1850, directed to a peculiar discoloration in the fauces of patients suffering from typhoid fever. This spot was ovoid in form, varying in size from three-eighths to half an inch in length, and in breadth from one-fourth to three-eighths of an inch, and usually located just to the right and left of the uvula. It was usually observed from the fourth to the eighth day of the attack, making its appearance earlier if the attack was ushered in with severity—the shade of discoloration ranging from a little deeper pink than the adjoining mucous membrane to a deep purplish black. Its presence was proof of the nature of the disease. With a deeper shade of color, as observed from day to day, the disease was known to be progressing unfavorably; the gradual lightening up of the tint indicated a restoration to health; fading away entirely during convalescence, and becoming a very deep purple in all the cases that terminated unfavorably. Seventeen years more of observation have led Dr. W. to lay great stress on its value in the diagnosis and prognosis of typhoid fever.

When One Eye only is Blind, is it Prudent to Attempt to Restore Sight while the other remains perfect?—Mr. Haynes Walton, speaking from his own experience, says, "Yes." He continues: "I should be deterred from operating only by the probability of the eye being too much damaged, to give that amount of sight which is known as useful sight, on which point much discrimination and a long familiarity with ophthalmic surgery are imperative. I have selected those cases only in which I was as sure as I could be that the fundus of the eye was sound, and the retina unimpaired, and the other conditions such as would insure the best amount of sight to be derived from such an operation, *i. e.* making a false pupil. I am certain, therefore, from the results of practice, of the advisability in certain cases of making a false pupil when one eye is sound. Confusion of vision does not and is not likely to result. In *coloboma iridis* in one eye, no confusion follows." Mr. Walton then details cases of monocular cataract in which he has operated with success and with great benefit to the patient, as well as some of opacity of the cornea, also monocular, where he did iridectomy.—*Med. Times and Gazette.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & Co. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA

New York, June 1, 1867.

THE DISCOVERER OF ANÆSTHESIA.

WHEN any brilliant discovery has been made, it is natural for a number of aspiring and ambitious individuals to claim the credit of it. This has eminently been the case with that of anæsthesia. No sooner was it fairly established that surgical operations could be performed without pain, than the attention of the profession was directed to the settlement of the respective claims of Wells, Morton, and Jackson, to the credit of conferring this priceless boon upon humanity. The controversy soon, however, became so lengthy and complicated that the majority of those who desired to see fair play became wearied and disheartened, and were ultimately unable, in the absence of testimony that could be relied upon, to come to any conclusion whatever. It was evident that the honor belonged to one of the three, but to whom in particular, there did not appear to be any great chance of determining. A sufficient time has now elapsed since the controversy alluded to, to enable all those who have not come to a conclusion upon the subject, to examine the facts of the case in the calm and unprejudiced manner which should characterize a search after truth. In such an agreeable task they have a very timely aid in a report by the Hon. Truman Smith, recently published. We venture to say that the facts which have been brought to light by this distinguished gentleman, will be found to present the question in its true aspect. The argument is a long and sound one, and serves to add not a little to the well earned reputation which the Senator has enjoyed for rare legal attainments. The bulk of the volume has already appeared in the columns of the Philadelphia *Medical and Surgical Reporter*, at the time when the pretended claims of Morton were being actively canvassed at Washington before the Congressional Committee; but the subject is now invested with a new importance in consideration of the signal defeat of the said Morton's claims, and the lapse of that amount of time which allows of the cooling down of all prejudice. The writer of the volume has spared no pains in accurately and thoroughly investigating his subject, and were we to follow him in the different steps which he has found necessary to take in order to enable him to point out the true relation of unquestionable facts sifted of their complications on the question at issue, we should consume unnecessarily much of that space which must be otherwise appropriated. We will then content ourselves with the simple account of the discovery of anæsthesia, based upon the facts which the honorable gentleman has given us, and leave the remainder of the work to the perusal of such of our readers who may wish to satisfy themselves concerning the foundations for the statements here made.

The discovery is dated as far back as the tenth of December, 1844. On the evening of that day, Dr. Horace Wells, a surgeon-dentist of Hartford, attended in that city a chemical lecture by Mr. G. Q. Colton, during, or after which, the said Colton administered to Dr. Wells, Mr. Cooley, and several others, some nitrous oxide gas. Mr. Cooley, while under its influence, became much excited, and in performing sundry evolutions contused and abraded both his shins. On recovering his self-possession he was interrogated by Wells as to the amount of pain he had suffered from the injuries received. In reply Cooley stated that he was not conscious of any such occurrence and was surprised, on pulling up his pants, to see a profusion of blood. Wells immediately turned to a friend and expressed his belief, "that a man could by inhaling the gas render himself so insensible that he could have a tooth extracted without pain." While escorting his wife home, he reiterated an expression of the same belief, and again reiterated it to a brother dentist and particular friend, on whom he called the same evening to canvass the subject. Having spent some time in considering the matter, Dr. Wells declared it to be his purpose to take the gas the next day and have a defective tooth (a large molar) extracted, and thus test the correctness of his theory. Accordingly the following day, Wells called on Colton, and desired the latter to take a bag of the gas over to the office of the dentist alluded to. On arriving at their place of destination, Wells placed himself in the operating-chair, was anæsthetized by Colton, and the tooth extracted. On recovering consciousness, the subject of the operation, in his satisfaction at the result, exclaimed: "A new era in tooth-pulling! It did not hurt me more than the prick of a pin!"

This, according to the testimony we have before us, was the first operation performed with an anæsthetic, and to the late Dr. Horace Wells belongs the sole credit of first conceiving the possibility and practicability of killing pain by its administration.

It was not until the 30th of September, 1846, that Morton made a test of the anæsthetic properties of sulphuric ether, at the suggestion of Dr. Charles T. Jackson, having, as it would appear, previously obtained whatever he knew of the practicability of anæsthesia from Wells himself, with whom he had been more or less intimately associated.

We have endeavored to present the simple facts of the case so clearly and satisfactorily proved by Mr. Smith, with the sole desire of doing our part in giving publicity to a matter which is of the deepest concern to every lover of justice; and to those who may have failed to convince themselves of the impartiality of the award of this great discovery to Dr. Wells, we would commend for their diligent perusal the masterly argument of the Hon. Truman Smith.

It is with extreme satisfaction that we notice the commencement of a move in the right quarter towards checking the prevalent practice of producing and procuring abortion. So deeply rooted has become the vice, that every influence which religion, morality, and law can bring to bear is now urgently needed. Medicine has long ago taken the lead; Christianity followed with its appeals; and now law brings up the van with an earnestness for the work which almost entitles it to forgiveness for its former stubborn apathy. The State of Rhode Island deserves the honor of the initiative in this latter respect, and the following enactment is an evidence of an enlightened legislation which does credit not only to the source from which it emanates, but the age in which we live. We quote the following act referring to the subject in question, passed at the January Session of the General Assembly, 1867:

It is enacted by the General Assembly as follows:

Sec. 1. Every person who shall be convicted of wilfully administering to any pregnant woman, or to any woman supposed by such person to be pregnant, or of advising or prescribing for such woman, or causing to be taken by her, anything whatever, or shall employ any means whatever, with intent thereby to procure the miscarriage of such woman, or of aiding and assisting therein, or by counselling and procuring the same, unless the same is necessary to preserve her life, shall, if the woman die in consequence thereof, be imprisoned not exceeding twenty years nor less than five years; and if she do not die in consequence thereof, shall be imprisoned not exceeding seven years nor less than one year: *Provided*, that the woman whose miscarriage shall have been caused or attempted, shall not be liable to the penalties prescribed by this section.

Sec. 2. Any person who shall be indicted for the murder of any infant child, or of any pregnant woman, or of any woman supposed by such person to be or to have been pregnant, may also be charged in the same indictment with any or all the offences mentioned in the preceding section, and if upon the trial the jury shall acquit such person on the charge of murder, and find him guilty of the other offences or either of them, judgment and sentence may be awarded against him accordingly.

Sec. 3. Whoever knowingly advertises, prints, publishes, distributes, or circulates, or knowingly causes to be advertised, printed, published, distributed, or circulated, any pamphlet, printed paper, book, newspaper, notice, advertisement, or reference, containing words or language giving or conveying any notice, hint, or reference to any person, or to the name of any person, real or fictitious, from whom, or to any place, house, shop, or office, where anything whatever, or any instrument or means whatever, or any advice, direction, information, or knowledge may be obtained for the purpose of causing or procuring the miscarriage of any pregnant woman, shall be imprisoned not exceeding three years.

Sec. 4. All acts and parts of acts inconsistent herewith, are hereby repealed; *provided, however*, that nothing in this act contained shall in any wise affect any complaint or indictment now pending, or that may hereafter be made or found for any offence committed before the passage of this act, against the provisions, or any of them, of an act in addition to chapter 212, title XXX., of the revised statutes, "of offences against the person," passed at the January session, 1861.

Sec. 5. This act shall take effect on and after its passage.

Another death, occasioned by the careless compounding of a prescription, is announced by the daily papers. It seems that a physician had prescribed for a patient in Brooklyn, suffering from neuralgia, a drachm of quinine and one grain of nux vomica, to be divided in fifteen pills. This was properly made up by an apothecary, and everything went on well. Having occasion to use some more of the same medicine a messenger was sent to a different store, owned however by the proprietor of the first. The clerk of the second store sent to the first store for a copy of the recipe, but instead thereof the copyist made the egregious and unpardonable blunder of transposing the quantities, so that the pill-mass, when compounded by the second party, contained a *drachm* of nux vomica and one grain of quinine. The unfortunate patient swallowed but two doses, and died in convulsions a few hours afterwards. It is not difficult to see where the blame for this transaction rests. The mistake was not made by the physician, for the writing was intelligible enough to enable the clerk of the first store to follow the directions; but the carelessness of the copyist, and the stupidity of the subsequent compounder, are, to say the least, r emarkable, and deserve that severe punishment which will probably be respectively meted out to them.

Reviews.

Transactions of the American Medical Association. Vol. xvii. Philadelphia. 8vo. pp. 713.

This yearly volume comes to us in its usual good style, and has the double merit of being much reduced in bulk, and at the same time containing many valuable contributions. The report of the annual meeting was so fully given in our columns that it would be hardly more than a reiteration to review the contents in detail. We were enabled to present, at the time we published the transactions of the body, an abstract of all the important papers that were read at the said session, and our readers have had long ago an idea of the worth of the volume. We cannot be expected to do more than refresh the minds of those who have not already become the possessors of this publication as to some of the more important contributions which it contains. They may be summed up in the following catalogue: "On the Relations which Electricity sustains to the Cause of Disease," by S. Littell, M.D., Philadelphia; "Report of Committee on Disinfectants;" "Causes and Pathology

of Pyæmia," by J. J. Woodward, M.D., U.S.A.; "The Clamp-Shield," by Prof. H. R. Storer, of Boston; "Paralysis of Vocal Cords with Aphonia," by J. Solis Cohen, of Philadelphia; "Luxation of Femur in Ischiatic Notch, of Nine Months' Standing," by L. A. Sayre, M.D.; "Original Instrument for the Performance of Lithotomy," by Prof. A. C. Post, New York; "Report on Diphtheria," by H. D. Holton, of Vt.; "Report on Spotted Fever," by J. J. Levick, Philadelphia; "On Etiology and Pathology of Epidemic Erysipelas," by Prof. N. S. Davis, M.D., Chicago; "Medical Literature," by Prof. C. A. Lee; "Medical Ethics of Specialties," by Prof. W. Hooker, New Haven; "Treatment of Angular Curvature of Spine," by Benjamin Lee, M.D., Philadelphia; and "Digitalin," by Prof. S. R. Percy, New York (Prize Essay). Altogether, the volume compares creditably with any of its predecessors; its typographical execution is admirable, and its illustrations very passable.

TRANSACTIONS OF THE VERMONT MEDICAL SOCIETY, for the year 1865. R. S. Styles, Burlington. Pp. 61.

THE Address of the President, Dr. O. F. Fassett, of St. Alban's, is an interesting survey of the mutual relations existing between the people and the profession, and the rightful demands of the profession upon both people and the government. To do the subject justice would require a quotation at length, a pleasure we are obliged to forego. "Statistics of Diphtheria in Vermont. By H. F. Stephens, M.D." In 1857, two years after the publication of M. Bretonneau's dissertation, a few cases are borne upon the registration report of the State as deaths from "Disease of Throat." Many deaths were then very likely to have been incorrectly credited to scarlatina, which prevailed very extensively in every county. It was not, however, until the succeeding year, that diphtheria was definitively assigned as a cause of death. Fourteen cases were then given, but scarlatina also increased in fatality. In 1859, 1860, 1861, and 1862, the mortality from diphtheria is quoted successively as 60, 212, 441, and 818, making a gradation of 2, 6, 11, and 18 per cent. The compiler is, however, as yet unable to draw conclusions, since the data are too limited. "The Physiological Properties and Therapeutic Action of Veratrum Viride. By L. C. Butler, M.D." (of Essex). This article, by the Secretary of the Society, gives much valuable information in a reasonable compass, and presents us with a rose-colored view of its general applicability in therapeutics. It is, however, but just to add that all the statements are well fortified by facts. "Case of Dropsy. By Lemuel Richmond, M.D. (of Derby)." The points of the case are paracentesis performed sixty-eight times, and 2383 lbs. taken in seventeen months and twelve days. "One day previous to and one day after the operation she would seem somewhat prostrated, otherwise generally very comfortable and able to go about, sometimes even to visit her neighbors. Notwithstanding the rapid accumulation in her case, there was but a short time that she seemed troubled with thirst. A post-mortem examination discovered an omental cake, a broad band extending from this to the fundus of the uterus, to which it was attached." "Criminal Abortion. By William McCollem, M.D. (of Woodstock)," an earnest, able paper, is followed by another on "Cerebro-Spinal Meningitis, by B. F. Ketchum, M.D. (of Brattleboro')." Dr. K. had seen some thirty cases in his locality, where the disease appeared about January 1, 1864. Having concluded that the feeble pulse was dependent upon the congested condition of the nervous centres, and that a vital organ was involved, he determined upon venesection, as being the only rational remedy. He claims that it should be performed early in the disease, and the blood let run "in a full stream from a large opening." Cupping and leeching are worse than temporizing expedients; and "venesection, practised in advanced stages of the disease, or after effusion had taken place, did harm, as then we have real debility." "Memoir of Dr. N. W. Fairchild, by H. F. Stevens, M.D. (of St. Alban's)," is next in order. "Morbus Coxarius, by Benjamin Fairchild, M.D. (of Milton), (communicated by the Chittenden County Medical Society)," is a practical paper, from which many useful hints may be derived. The last contribution is from the pen of Dr. C. P. Frost (late Surgeon of the Board of Enrolment, Second District, Vermont), and being relative to the draft during 1863, 1864, and 1865, is statistical in character.

When we remember that the present constitutes the first published compilation of the "Transactions," we cannot but admire the enterprise of the Society in presenting so creditable an issue to their brethren, and, above all, would we commend that rare self-denial which has in no instance allowed the work to go beyond the material.

OBSTETRICS: THE SCIENCE AND THE ART. By CHARLES D. MEIGS, M.D., lately Professor of Midwifery and the Diseases of Women and Children, in Jefferson Medical College at Philadelphia, and one of the Physicians to the Lying-In Department of Pennsylvania Hospital, etc., etc. Fifth edition. Revised; with one hundred and thirty illustrations. Philadelphia: Henry C. Lea. 1867. 8vo., pp. 754.

PROF. MEIGS'S work upon Obstetrics has been before the public for the past thirty years, and since its first publication in 1838, as a modest volume of two or three hundred pages, it has kept its ground as an authority. It has passed through four editions, and the fifth is just issued, after having suffered a thorough revision by the author. Although not much new matter has been introduced, several parts of the work have been virtually re-written, and the results of this labor are given us with the sad announcement that this will probably be the last occasion that the writer will have of improving his book. The result of this endeavor of our author to give the finishing touches to his popular treatise, has been to make it of particular value to the student and younger physician by the embodiment of a vast number of practical hints and useful suggestions, gained by a very long and large clinical experience. To such as may not be acquainted with the merits of the work through previous editions, we would confidently recommend it as a most reliable, useful, practical one for the student and younger physician, as many of those very necessary details are dwelt upon which may be looked for in other treatises in vain. The style is attractive, concise, and earnest; and the reader is all the time made conscious that his teacher has but one object in view, that of instruction, and that no effort is spared by him to faithfully and conscientiously discharge such a duty.

CODE OF MEDICAL ETHICS, ADOPTED BY THE AMERICAN MEDICAL ASSOCIATION. Revised to date. New York: W. Wood & Co., 61 Walker st. 1867. 18mo. pp. 39.

THE publishers of this little book have anticipated a want long felt by the profession—that of having in a convenient shape the Code of Medical Ethics. There is now no excuse for any delinquent brother being unacquainted with the rules which should govern his actions; and if any of our readers should find any such who refuses to be convinced of the error of his ways, he should purchase a copy and present him with the same.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, FEBRUARY 27, 1867.

DR. H. B. SANDS, President, in the Chair.

DR. POST exhibited a hygroma of the neck which he had treated by excision. The patient was a woman twenty years of age, who first noticed a painless enlargement on the side of the neck, about two years ago. The history was the ordinary one of a cystic tumor in that locality. The mass was first punctured, but the sac soon filled again, when the Doctor determined to exsect it, which he did without any great difficulty. He remarked that this was the first operation of the sort which he had done, and from the good results in this instance he was encouraged to generally adopt the practice.

DR. SANDS asked if Dr. Post had been in the habit of injecting the pure tincture of iodine into these cysts, as recommended by Syme.

DR. POST had no distinct recollection of so doing.

DR. PEUGNET presented a heart and kidneys removed from a patient, who first showed symptoms of cardiac disease on the first of February, 1864. It first commenced with an attack of dyspnœa, ending in syncope, which lasted for several hours. On examination he found hypertrophy of the heart, with emphysema of the upper lobe of the left lung. At that time there was no sign of any renal trouble. The patient had two or three attacks of syncope from that time until last spring, when he took a trip to Europe. While abroad he consulted several distinguished physicians, who virtually substantiated the diagnosis of his attending physician. When the patient returned about the middle of last October, Dr. P. not only found that the hypertrophy had very much increased, but that œdema of both lungs was superadded to emphysema. Professor Clark was then called in consultation, and an examination of the urine being then made, resulted in discovering evidences of Bright's disease. From that time, however, no traces of disease of the kidneys were discovered, notwithstanding repeated examinations were made for that purpose. There were no murmurs detected during life, although the autopsy showed atheromatous deposits around both the mitral and aortic valves, there being besides a slight rupture in one of the latter. The lungs were found to be extensively emphysematous, and the liver in the first stage of fatty degeneration.

In answer to a question from Dr. Noyes, he stated that the urine had been found deficient in urea upon two different occasions.

DR. DRAPER remarked that a well marked contraction of the aorta, which existed in the specimen, was of itself sufficient cause of the hypertrophy.

I. CARIES OF SPINE CAUSING ABSCESS.—DEATH FROM ASTHMA MILLARI. II. CHEMICAL SOLUTION OF URINARY CALCULI.

DR. BAUER presented a specimen of fracture of the first dorsal vertebra, accompanied with the following history :—

The little patient was but three years and nine months old. She belonged to a healthy family. About four months ago she met with a fall from a chair against a wall, in such a way as to force her head forward upon the chest. Since then she has suffered severe pain at the neck, and general attenuation with the usual constitutional disturbances. I saw the patient for the first time on the 14th of January. The cervical portion of the spine was bent forward, and the head strongly reclined. At the cervico-thoracic portion of the spine there was a marked prominence of the several spinous processes, of which the first dorsal projected furthest. While carefully proceeding with the examination the patient was suddenly attacked with asthma Millari, and so intense and lasting was the paroxysm that I feared instantaneous death, the respiration being totally suspended for at least fifteen seconds, her face becoming thoroughly cyanotic. I did not carry the examination further, being satisfied that there was a structural lesion of the spine, with probable formation of abscess and pressure upon the recurrent nerve. The mother told me that these paroxysms had been quite frequent of late, but that the present one was in her estimation the severest. The treatment could be but palliative. I ordered a water bed, the recumbent posture, and very careful handling. My apprehension that the child would die from the repetition of such paroxysms was soon fulfilled. After a few light paroxysms she succumbed to a very violent attack on the 19th inst.

Fortunately an autopsy was permitted. I found an abscess in front of the spine, commencing at the fourth cervical and terminating at the fourth thoracic vertebra. The anterior wall of this rather narrow abscess was formed of the periosteum and the longitudinal ligament, and encroached materially upon the œsophagus. The diseased portion of the spine being removed, is now exhibited to the society. The specimen consists of the fragment of the seventh cervical, and the second and third thoracic vertebræ, the next superior and inferior vertebræ being substantially healthy although slightly corroded. The bodies of last cervical and first thoracic vertebræ are entirely destroyed up to the place where the bodies join the respective arches. Of the second thoracic, a large portion of the body has disappeared, whereas the body of the third thoracic has been but slightly affected. The first and second ribs on each side have lost their respective vertebral insertions. The spinal cord is deprived of its bony protection through the destruction of the two vertebral bodies. There is a small sequestrum remaining, obviously belonging to the seventh cervical. It is surprising that under these circumstances no paralysis has supervened. The matter that filled the abscess was rather thin, but presented otherwise the ordinary attributes. The rapid destruction of the vertebral bodies in comparatively so short a time, scarcely a vestige being left, is a matter of great pathological interest. Next in interest is the question of causation. There appeared to be nothing in the child of a tubercular diathesis, either inherited or acquired, nor have I found any morbid substance that could possibly be confounded with tubercular deposit. On the other hand, it is known that the child met with a serious accident, which was moreover of a description to cause, if not a fracture of the vertebral body, at least a crushing. And lastly, it is substantiated that the patient was entirely well until the accident occurred, and since then has been suffering from symptoms entirely local in origin. I consider myself, therefore, justified in assuming that the specimen represents one of those numerous cases of caries and deformity of the spinal column that are of a strictly traumatic origin.

He also presented a few urinary calculi, of which the largest weighed a little over two drachms, and gave the following account of the patient from whom they were removed in successive operations. The subject was a child three and a half years of age. The first operation was the bilateral one, and due care was used to clean out the bladder and urethra afterwards. The recovery from the operation was rapid and satisfactory. A fortnight afterwards, however, new signs of the existence of lithiasis began to show themselves. Interfe-

rence was deferred for four months, when the sufferings of the child becoming so intense, the old wound having opened, and fistulous connexions having formed between the perineum and bladder, there was no alternative left but to repeat the former operation, so as to remove calculi and likewise close up the fistulous track. On that occasion several small calculi were taken away. Dr. B. had previously carefully examined the urine, and had convinced himself that it was very much saturated with urates and phosphates. About five or six weeks after the second operation, there were new signs of stone; and it being evident that the circumstances of the case forbade the performance of a third operation, he resolved to treat the case with chemical reagents, after removing such calculi as had become impacted about that time into the urethra. When he experimented with fragments of the calculi, with a solution of one part of nitric acid in eight of water, he discovered that he had no difficulty in almost entirely dissolving them, there being left nothing but a soft pulp. Under the impression that the bladder could easily void such masses, he commenced the injection of the solution into the cavity of that organ. The liquid was kept in the bladder for two or three hours at a time, by means of an india-rubber ring enveloping the end of the penis. He watched the effects of this treatment very carefully in the beginning, and soon felt assured that it could be carried on with impunity. Pulpy masses were soon after discharged, and finally even these disappeared at the end of a period of sixteen months, during the whole of which time the injections were continued. It is proper to state that, in the mean time, the patient took internally the nitro-muriatic acid.

EXTENSION OF INFLAMMATION FROM A DEEP CERVICAL ABSCESS TO THE BRAIN.

Dr. Noyes presented a brain and section of the petrous portion of the temporal bone, removed from a patient in the Charity Hospital. On the 15th of February his attention was directed to a female who had been admitted on account of severe trouble of the right ear. She had been an inmate of the institution a couple of days, but the history of her case was extremely imperfect. All that was known of her was that she had suffered from a severe pain on the side of her head for the previous month. Although he was able to make only a very hasty inspection, the following peculiarities were observed:—A large swelling over the angle of the jaw, head turned to the opposite side, intelligence very much diminished though not abolished, no general paralysis of sensation or motion. The account given of the case looked towards the probability of there being caries of the petrous portion of the temporal bone, with meningitis supervening. Three days after the patient was again seen, when the symptoms of disease of the brain were even more pronounced than on the previous visit. The right eye was then carefully examined. The pupil had its normal reaction to light, the orbicular muscle preserved its functions, although the facial nerve was paralysed. This latter fact was, however, noticed at the first visit. Examination with the ophthalmoscope showed pulsation of the retinal veins with diminished size of the arteries, and absence of capillary hyperæmia of the nerve. No evidences of actual disease of the ear were found. The membrana tympani was normal in appearance. The swelling over the angle of the jaw was opened, and discharged a small quantity of fœtid pus. A considerable portion of the ramus of the jaw-bone was denuded and dead.

The general symptoms, at this time, were extreme stupor; not, however, amounting to coma. The pulse was about 100, respiration 20, the other phenomena being as already described. She died within a few hours after the examination. The diagnosis was that the abscess, which was deeply situated in the tissues of the neck, had excited inflammation of the brain; but how this was done, was left to the autopsy to determine.

Autopsy.—The autopsy showed the following facts: That there was very considerable turgescence of the meninges of the brain. Upon removing the dura mater, pus was found upon the side and anterior portion of the right hemisphere, the left hemisphere being free from any exudation. On removing the brain, pus extended down over the right hemisphere to the base of the brain, occupying the whole inferior surface of the organ, but concentrated more particularly about the middle fossa of the right side. The dura mater was readily separated from the base of the skull, but there was no pus between it and the bone. An incision was carried along the line and angle of the jaw; the whole bone, when exposed, was found surrounded with suppuration, which had denuded it of its periosteum nearly down to the dental foramen. The joint was completely destroyed, and disarticulation was of course effected with perfect ease. The cavity of the abscess which surrounded the joint was so situated as to lie above, in contact with the base of the skull, within the cervical vertebræ and pressing upon the pharynx, and externally covered with the sterno-cleido-mastoid muscle; its whole capacity being about the size of a pullet's egg. It was at first fancied that before death there was a communication with the brain through the spheno-maxillary fossa, but this supposition was overthrown by the absence of protrusion of the eyes and œdema of the lids. A careful examination of the upper part of the abscess with the probe, discovered that the foramina for the tranmission of the nerves, particularly the foramen ovale and foramen spinosum, had their margins denuded and roughened; and, furthermore, the basilar process of the occipital bone presented a very injected and succulent appearance. On examining the petrous portion of the temporal bone, and making a section of it, the external auditory canal was fortunately laid open, and the cavity of the middle ear. Both the bone and the auditory apparatus were found perfectly healthy. A further preparation of this specimen, by Dr. Weir, gave a very satisfactory exposition of the anatomy of the internal ear. The case was a very interesting one, as proving an unusual course for the extension of inflammation from a deep cervical abscess to the cranial cavity.

MALIGNANT DISEASE OF THE DURA MATER.

Dr. Draper presented a specimen of malignant disease of the dura mater. The patient from whom the specimen was taken was a young Irishman, fifteen years of age, who was admitted to the hospital on the 3d of January. He stated that he had been in good health until last spring, when he had a severe attack of fever and ague. He recovered from that, however, and continued at his work until about two months before he entered the hospital, when he began to suffer severely from pains in the lower part of the back, extending around the abdomen in front, and down the thighs. These pains were aggravated by movement, and were ascribed to rheumatism. He however kept at his employment until ten days before his admission, when he was obliged to give up and take to his bed. He walked into the hospital, although his gait was somewhat unsteady, and he leaned considerably forward. When Dr. Draper saw him on the 3d of January, he was suffering extreme pain in the lower part of the back, extending down towards the pubes in front, and the sciatic nerves posteriorly. The pain was aggravated by movements, and also by pressure; there was tenderness over the lower dorsal and lumbar vertebræ, and on the left side there appeared to

be some swelling and greater tenderness. His general condition was feeble, the pulse was rapid, and the skin hot. The first impression was that he had, in all probability, a lumbar abscess; but as there was an inability to detect fluctuation in the swelling on the left of the spine, no positive opinion could be arrived at. He was obliged to sit up in bed, and every movement was accompanied by pain, which was much aggravated at night. As a consequence he was kept under the influence of morphine, hypodermically administered, during the whole of his illness. On the third day after his admission, it was observed that he had retention of urine, and on examination there was absolute paralysis of motion, and very considerable anæsthesia. Although the bladder was paralysed, the sphincters retained their integrity. There was a slight amount of priapism noticed at this time. This condition of absolute paralysis of motion of the lower extremities and anæsthesia continued about a week, when the anæsthesia was lost, and the patient became extremely hyperæsthetic, intolerant of the slightest touch upon the lower extremities. There were no spasms of the lower extremities, the reflex function being entirely abolished. He continued in this condition until the 17th of February, when he died.

The only symptom which indicated any change in his condition was that after the paralysis had continued about a week, the rectal sphincter gave way. The vesical sphincter continued good until death. His condition grew worse, his perspiration profuse at night, pulse feeble and rapid, and emaciation extreme. Within four days after there was paralysis of motion, a large bed-sore formed upon the sacrum, and the other prominences were threatened with the same condition. It was necessary, on account of this, to protect him with great care with oakum ring-pads; and with the exception of the large bed-sores on the sacrum, and others which followed over the trochanters, he escaped further serious trouble in this respect.

The autopsy was made twenty-four hours after death. The emaciation was extreme. The rigor mortis was not very considerable. The lungs were found to be healthy. This is an important fact; as, after admission, his chest was examined, and there was found dulness, a prolonged expiration, and increased vocal resonance. The kidneys were found diseased. The surface of one of these organs was marked with ill-defined yellowish deposits, infiltrated in the cortical substance. Several of the mesenteric glands were very much enlarged, and were the seats of medullary cancer.

The cavity of the spine was very carefully opened, and the cord removed from the third dorsal vertebra down. On opening the cavity, the membranes were found below the dorso-lumbar enlargement, and very much distended with fluid; and on slitting up the membranes, this fluid was found perfectly clear and free from any lymph or purulent admixture. On examining the membranes a deposit was found, extending from the point of emergence of the tenth dorsal to the emergence of the first lumbar, resembling lymph. There was no marked injection of the membranes, the peritoneal arachnoid was free from turgescence, and the visceral arachnoid was scarcely more injected than normal. The pia mater was nearly natural; the consistence of the cord was normal, both above and beneath the deposit. On dissecting the areolar tissue about the deposit, it was found that it had a very well defined margin, and on microscopic examination, there was an entire absence of the elements of inflammatory exudation; but their other elements consisted entirely of nuclei, granular nucleated cells, and a small amount of connective tissue. These nuclei were a little larger than pus-cells, being about the two-thousandth of an inch in diameter. The same elements were found in the enlarged mesenteric glands. The substance of the cord was surrounded by this deposit, and many of the ganglionic cells were very granular.

Dr. Loomis could not see how there could have been dulness on percussion, increased vocal resonance, and prolonged expiration, without some deposit in the lung to explain it.

Dr. Krackowizer remarked that in shallow, hurried respiration all the physical signs of absence of air were often given.

Dr. Loomis could conceive it possible that the respiratory motions should modify the sounds heard on auscultation, but they could not, in his opinion, change the vesicular character of the respiratory murmur. In order to give all the physical signs referred to by Dr. Draper, a solidification by effusion must take place.

Dr. Draper remarked that the diagnosis, at first, had been tubercular deposit in the lung, with the same disease in the spine. The autopsy was the only thing that decided against it. The patient was carefully examined, and the physical signs were unmistakable. As there proved to be an absence of disease of the lung, he was forced to conclude that the phenomena were due to other causes, the most likely one of which was imperfect and shallow respiration. There was an absence of the usual amount of air to give the lung tissue its normal physical signs.

Dr. Loomis contended that there must be some other cause at the bottom, as, for instance, an effusion of some kind. This might have been a temporary affair, and at the time of death left the lung in a healthy condition.

Dr. Krackowizer stated that simple congestion of the lung, *without* effusion, would produce many, if not all, the signs of solidification. The same condition was induced by the absence of the normal quantity of air in the lungs. He had proved this in those cases of croup which had given him reason at first to suspect a complication of pneumonia. He did not believe that any amount of congestion could alter the respiratory sounds to give evidences of even a slight degree of congestion unless there was some effusion.

Dr. Bibbins asked if there was not dulness on percussion in the hypostatic congestion of typhoid fever.

Dr. Krackowizer remarked that when that did exist there was always effusion

Dr. Weir presented the ulna of a boy who had sufferred from osteo-myelitis of that bone, the result of a blow received by a falling ladder. The patient entered St. Luke's Hospital on the 30th of January, three weeks after the receipt of the injury. Two days after admission a swelling formed in the situation of the injury, which, being opened, discharged about two ounces of pus. This relieved him somewhat from the pain which he had previously suffered, and he went on well enough for forty-eight hours, when he began to suffer from great nervous excitement and prostration; the pulse was feeble and quick; there was sinking of the eyes, together with other phenomena marking great constitutional disturbance. At the end of twenty-four hours a circumscribed pneumonia was found just below the scapula, as well as a swelling near the elbow-joint of the opposite arm and considerable pain in the calf of the right leg, with tenderness and redness along the femoral vessels. The patient's condition kept about the same for three days after this, when a large abscess was noticed over the right hip-joint, communicating with it and extending some distance down the thigh-bone. The swelling in the right forearm did not augment rapidly. Further than this, there was nothing noticeable, with the exception that there were no chills, and, with the exception of two days preceding his

death, no sweating. The treatment consisted of sulphite of soda in 3 ii. doses three times a day. The temperature throughout ranged from 104° to 105°. An examination of the bone after its removal showed its medullary tissue reddened, except at the central portion of the canal. The redness was most intense near the elbow-joint, where there was an abscess of the bone, walled in by adventitious tissue. The examination of the diseased portions by the microscope showed the usual pathological characters. The wrist-joint not involved.

Dr. Wooster Beach, Jr., presented two hearts, taken respectively from men who had died suddenly. One was the seat of fatty degeneration, and the other had an aneurism above the aortic valves, causing fatal pericarditis. The previous histories of the patients were unknown.

TUMOR OF THE BRAIN.

Dr. Loomis exhibited a specimen of tumor of the brain, taken from a man thirty-five years of age. The patient was admitted to Bellevue Hospital on the 26th of January, 1867, and stated that some two years before he began to be seized with attacks of dizziness, which would last for a moment, pass off, and be followed for a short time with twinging of the facial muscles of the left side. These muscles afterwards became paralysed. In October, 1866, he was suddenly seized with hemiplegia, which lasted a week or ten days and then disappeared, the facial paralysis continuing, however, until his death. When admitted to the hospital no evidence of paralysis, except in the facial muscles. *He had the ordinary amount of intelligence of a person of his class*, and seemed to be in comparatively good health. After he had been in the hospital for a short time he became totally blind, and in a week or so began to grow stupid and finally died of coma.

At the autopsy a tumor was found in the posterior lobe of the left cerebrum, embracing very nearly the whole of that organ. It seemed to be attached firmly to the membranes of the brain, the dura mater, and arachnoid. The surrounding brain tissue was very much softened, but the tumor itself was well defined. It was of an opaque whitish color and mottled with some grey-looking substance. On microscopical examination by the curator of the museum, the cells of the grey portions were so small that they presented the appearance of nuclei. There was also in this substance a network of fibres inclosing cells in vast numbers. The tissue was freely vascularized. The white portion presented the cells in an advanced state of fatty degeneration.

The interest of the case centred in the long existence of such a disease without symptoms, and also to the fact that the hemiplegia was on the same side as the brain lesion.

Dr. Noyes remarked that the sudden blindness of the patient was evidently due to the softening of corpora quadrigemina.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, April 3, 1867.

Dr. A. C. Post, President, in the Chair.

EPIDEMIC CONTAGION.

Dr. Wm. C. Roberts read a paper upon the above subject, embodying the following propositions and inferences :—

Seven great epidemics are generally recognised, viz.: typhus, small-pox, scarlatina, measles, hooping-cough, influenza, and cholera, each of which is caused by a separate and specific morbid poison. To this list may perhaps be added plague, erysipelas, puerperal fever, and mumps (parotitis). Plague is never seen among us. Erysipelas and puerperal fever, with typhus, seem to be interconvertible, and *may* be one and the same disease, and derivable from the same animal poison. Intermittents are never epidemic nor zymotic, neither is yellow fever epidemic, but its virus is transportable, and its contagiousness not wholly undoubted.

Various hypotheses as to the nature of these poisons exist; atmospheric, telluric, animalcular (the most probable), fungoid, spontaneous, gaseous, solid, etc., but nothing is as yet positively known on the subject.—(See Holland, *Notes and Ref.*)

All epidemic poisons seem to have reached Europe from the East, and to have found their way hither. None have originated here; but of the manner in which they originated, nothing is known; all are of great antiquity. The poison of cholera had existed in India for centuries before it was introduced into Europe, and then into America, and is now endemic there.

These poisons, however originating, infected the human body with a specific disease, which has never changed or lost its power or property. Many of them possessed the power of re-multiplying themselves in the body, by an intra-corporeal zuma, or zymotic (ferment); the germs so multiplied being exhaled from the body with secretions, and diffused in the surrounding atmosphere, there again undergoing an extra-corporeal, intra-aerial zymosis and re-production, and infecting those brought into indirect contact with the patient, through the medium of the (impure) atmosphere. Contagion of the second genus (J. M. Smith). That germs, further multiplied and diffused through the air (intra-aerial zymosis), wafted by the wind, or advancing by their own peculiar powers of progression, invade various localities at intervals, or in succession, and produce endemics, or epidemics, which are a succession of endemics, each poison producing its own specific disease, with its attending phenomena.

Emanating thus from the bodies of the sick, they become *animal* poisons—*idio-miasmata*. Those poisons which are *animal*, specific and zymotic, are both contagious and epidemic; no others are, or become such. To say that a poison is an animal one, is tantamount to this. Diseases of malarious origin: Koino-miasmic are never extra-corporeally zymotic, never contagious in any degree, unless mixed (idio-koino miasmic), and never epidemic. Nor are the poisons transportable by air or other fomites, unless we say that that of yellow fever is, and allow it a measure of contagiousness, for which some have contended.

Such diseases arise locally from certain causes, prevail locally, and do not extend far (endemic), and cease on the cessation of their cause, leaving behind no latent germs of infection for future development. Bilious remittent and intermittent fever belong to this catagory. Influenza, the genesis of which is unknown, is per-aerially portable. Specific poisons communicate their own action and effect, analogous transformations in the bodies of the sick, and the disease produced by them is always one and the same specific, and *sui generis*. In the case of typhus, erysipelas, and puerperal fever, there is observed a curious interconvertibility of poisons, the one sometimes transmitting the other, which has caused them to be regarded as identical poisons and diseases, although each is often seen unmixed and pure. Sometimes they concur, and only one poison is transmitted, either according to its greater prominence, or under circumstances and influences un-

known. Other morbid poisons concur in the same individuals, and thus we see, that while the general rule holds good, that specific poisons produce specific diseases, poisons may co-exist, if they do not blend; and a mixed, mongrel compound, or spurious disease exist, or result, not easily to be classified, of which certain forms of typho-bilious, icteroid, or malarial fevers are examples. The poison of one disease seems superadded to the other.

Mr. Farr, Reg. Gen. of England, tells us that "zymotic" is now substituted, to avoid a tedious periphrasis for "epidemic." All epidemic (zymotic) diseases, I believe, are contagious, except influenza (which may not be zymotic), extra-corporeally, although interaerially it must be, to account for its excessively rapid development. So that, with this exception, all *epidemics*, cholera included, are zymotic and contagious; and, because zymotic and contagious, epidemic, which others, not such, are not.

Contagions of the first genus (actual contact), are intra-corporeally zymotic in a degree, producing disease only in the body of the recipient, but, by infecting his fluids (blood, lymph, pus, etc.), enabling them to communicate the same diseases by actual contact (inoculation.) They are not communicable through an atmospheric medium, nor are they mixed; for although, if blood be drawn with the vaccine virus from a syphilized child, syphilis may be communicated, yet pure fresh lymph alone communicates no such disease. The exanthemata concur; but each eruption is distinct and separate; and the rash of typhus, the rose-colored lenticular spots of typhoid fever, and patches of erysipelas, may all concur or co-exist in the same individual. Hence it seems difficult to consider them identical poisons. Two at least of the exanthemata are inoculable also.

Typhus and typhoid poisons may concur in the same individual. These are the cases which have caused the doubts as to the separate identity of the diseases, and produce in the same case a coincidence of the symptoms and pathological lesions of each. Mixture of idio and koino-miasma produces a hybrid class of fevers, of bilious or icteroid character, with yellowness of skin, and black vomit, which, as a general rule, is not seen in typhus fever. The typho-malarial fever, described by Dr. Woodward, U.S.A., in camp fevers (which he deems non-contagious); the compound Banker street fever of 1820; the Irish icteroid typhus, or yellow fever, as described by Graves in his clinical lectures; the Bulam fever of Africa, and the disease on board H. M. S. Eclair, etc., seem all of this character: and it is very difficult to make the diagnosis between them and yellow fever. A strong infusion of the *koinic* element gives to them their bilious character. A similarly predominant idio-miasm determines their typhoid character, and imparts to them a qualified contagiousness. Perhaps it is to the super-addition of idio-miasma (typhus poison), from without, or inwardly generated in course, that the typhoid character of many diseases so characterized is to be attributed.

A certain amount of intra-corporeal zymosis is necessary, in all cases, to produce disease; but, unless the morbid product so formed be eliminated (extra-corp. zymosis), no contagion follows, and the disease remains confined to the body of the recipient of the poison, and not extending beyond him. *If animal*, it may be reproduced in another by inoculation with his fluids, and becomes a contagion. If not, it dies in the patient, and is not reproduced, and hence is never contagious or epidemic (*ex. gr.* intermittent fever poison); only certain kinds of persons seem to be susceptible of this elimination of reproducible germs, this that I have called extra-corporeal zymosis, and these are the contagions proper. No disease is contagious in which this does not occur; and I think, that, unless there were a further intra-aerial zymosis, regeneration, remultiplication, and diffusion *per auram*, of specific germs, wafted by currents, or progressing by means of vehicles, *or* by a peculiar power of self-progression, whereby the poison is rapidly diffused and regenerated, and everywhere carried so that all are subjected to its effects, according to their degree of predisposition and susceptibility, epidemics could not occur.

If the poison generated in and exhaled from the bodies of the sick extended no further than a few feet from the bodies of the sick, and was there diluted, or destroyed by ventilation, I don't see how diseases could spread as they do, and become universal. Upon this point there is some difference of opinion. On the one hand, it is said that the miasms of small-pox and typhus extend only a few feet from the bedside: that "there are no grounds for the popular opinion that typhus may be propagated through the atmosphere, from a poor-hospital to the houses in the neighborhood" (Murch.), which, although opposed to the idea of intra-aerial zymosis and progression, may be true in the absence of any epidemic prevalence of the disease.

On the other hand, it is said that although the spread of the typhus virus is limited, that of small-pox does extend through all parts of the house, from a single bed, even from one house to another in the same vicinity (Wood. Pract. of Med.). It is known that more than fifty persons contracted small-pox from the body of Louis XV. by simply traversing the vast apartments of the Palace of Versailles, in which he lay mortally ill of a most virulent form of that disorder, without ever approaching his person. That the virus of small-pox has crossed a river 1,500 feet wide, and infected persons on the other side; that the poisons of scarlatina and puerperal fever infect all parts of a house or hospital for long after the removal of the inmates and thorough purification; that during a prevailing measles or scarlatina or cholera epidemic, and even yellow fever, persons are infected by walking the streets, and in houses, without approach to the sick, which is a thing of daily observation and occurrence in private families, and could not happen unless there were a poison in the air. Court-houses have been infected throughout by the entrance and transport of miasm from filthy, not diseased, prisoners (Black assizes). Murchison says that "typhus prevails, for the most part, in great and widespread epidemics, independently of smaller endemics;" and Graves distinctly says that "typhus will spread among hospital patients in the same ward, independently of anything connected with filth or foul air," not always communicated, I should suppose, by the persons of the attendants. We know that these poisons exist in the air, attack persons on ship-board, long and far away from land, persons in solitary confinement (small-pox and cholera). In cholera, hundreds of cases occur within the same day, at such distances, and in such diverse parts of a city, that they cannot have arisen from personal intercourse, or from its infection. Influenza, yellow fever, and other malaria are felt, on approaching a coast where they prevail, at some distance; and the former affects almost the entire population of a city, town, or neighborhood, in a few days, and spreads at times over an entire country or continent; its cause being certainly portable. How shall we explain these discrepancies of opinion, or account for the rapid and wide spread of these epidemics? By uniform personal contact? By fomitic infection? By *de novo* genesis, or development under meteorations or epidemic influences, which cannot apply to imported poisons, how-

ever much they may favor it, and is not known to be true of any? Or by each and all of these causes combined, together with an intra-aerial development and remultiplication of infectious germs (zymoses) and a peculiar method of progression of germs, a zymosis, not in the body alone, but in the air and soil; "the poisonous air becoming a ferment which produces its like," (Clark's Lectures, MEDICAL RECORD, lect. 3d). It is not necessary, it is not possible, in any prevailing epidemic, to look for personal contagion in every case as a cause of infection. The disease is too general, and its spread too rapid. The atmosphere contains the poison, however introduced or developed. If the disease is specific, the poison is specific, or the disease could not be induced. If it is intra-corporeally zymotic, reproducible, that is, from the bodies of the sick, it is contagious, and the infection, *in any way*, by a specific and zymotic person, is contagious; and except in the case of influenza, I don't believe that any existing epidemic is wanting in this character; and, if all poisons are absorbed, communication of specific disease, in any way, from one person to another, is contagion, whether by swallowing of air or infected fluids, or by contagious or pulmonary absorption, which is most probable. The mode of infection is the same in all, no matter where the poison is derived from, breath or skin or stools, and they are all similarly contagious (contracted, that is, in the same way), but not equally so, which depends upon the virulence and dose of the poison, and the degree of susceptibility of the exposed.

To originate epidemics, a contagious principle and a meteoratious influence may both be needed. Spontaneous development does not oppose contagion. All known contagions of epidemic character so originated, and they may again do so. But most of them are now domiciliated and domesticated, and arise now from development of small stocks of concealed contagion, which is always possible when spontaneous development is suspected. Some—yellow-fever, cholera, and influenza—are never known to originate *here;* always they are imported poisons, and their germs, if not contagious, are at least portable. No specific poison can be introduced anywhere whose germs are not portable and specific, nor regenerated, unless zymotic, intra-aerially at least; so that portability of such germs may almost be said to be synonymous with contagion. The germs of typhus, small-pox, hooping-cough, scarlatina, and cholera, are portable by fomites, perhaps those of typhoid fever, and they are all contagions. Those of yellow-fever and influenza are transportable through the air, regenerable in it, multiplicable in it, and zymotic in it, and infect by absorption. But if they be not intra-corporeally zymotic and exhalable poisons, they are not contagious. Thus intra-corporeal zymosis is the test of contagious epidemicity. No such property attends the miasms of bilious remittent and intermittent fever, which are never either epidemic or contagious. Direct contagions of the first germs differ from those of the second (indirect) mainly in that there is no extra-corporeal emanation of contagious germs. The exanthemata, although supposed to be usually of spontaneous origin (Smith, Barker, etc.), and certainly at times imported (small-pox, especially), now generally arise from rekindlement of small stocks of dormant virus always on hand in large cities, and perhaps elsewhere. Typhoid fever is supposed to be engendered by fæcal fermentation, filth, etc.; and many attribute typhus to similar local causes. Erysipelas would seem, also, to arise independently of contagion. These are not, like cholera and influenza, imported, and may have new and local organs. But it may be that no zymotic poison, once existent, ever does become wholly extinct; the exanthemata never have, and cholera is still endemic in India, and local circumstances and meteoratious influences easily and soon rekindle them. Doubtless, they occur comparatively less frequently under the improved state of hygienic science.

But I doubt if we are authorized to deny, as some zealous sanitarians have done, that there is any such thing as contagion, and assert that *all* so-called "contagions" result, in every instance, from neglect of sanitary precautions. Diseases, so originating even, would not the less *be* contagious, say small-pox, for example. How, then, deny its existence?

There is no such thing as contingent contagion: it is only qualified. Epidemic diseases are not identical; but are all analogous in general law and action, although differing specifically, yet so much alike in these, that what is true of one is true, for the most part, of all. Influenza seems to be the only epidemic poison in which zymosis (and that not extra-corporeal) is separable from contagion. No morbid poisons originate within the body; they are all received from the air into it. Those which are subsequently reproduced in and eliminated from it and become animal, whether originating in an idio or koino-miasm, are zymotic contagions. It is curious how different are the varieties and effects of poisons, whose (original) causes appear so similar. Epidemic influence alone will not account for them, and, if it did, nothing is known of its mode of action.

That *typhus* originates from ochletic miasm, is generally believed; but not by Watson, nor by Wood, that offensive effluvia, filth, and poverty produce this specific form of fever. But there is between them, whether as cause or effect, a connexion so close that it cannot be safely disregarded.

Barker attributes to the foul effluvia of drains, cesspools, etc., cases of typhus, and scarlatina even; and Murchison thinks that typhus fever may be so induced. The real character of the diseases, if any, so produced, is an interesting subject of physiological inquiry.

These statements, in regard to epidemic contagion, are generally known, and to be found in most treatises on practical medicine, and the influences from them, right or wrong, are easily drawn. But I do not know where, elsewhere, they are as succinctly collected and enunciated.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

CONVERSATIONAL MEETING, MARCH 20, 1867.

DR. ANDREW NEBINGER, PRESIDENT, in the Chair.

ANGULAR CURVATURE OF THE SPINE.

(Concluded from page 94.)

DR. BENJAMIN LEE, Philadelphia, presented to the Society a copy of his recently published papers on Pott's Disease, entitled "*Contributions to the Pathology, Diagnosis, and Treatment of Angular Curvature of the Spine.*" DR. LEE stated that the points which he desired to establish in this series of articles were threefold:—*First:* The existence of a symptom of this very distressing affection, which could be relied on almost unfailingly, and was present long before—months, even an entire year, it might be—before deformity made its appearance; a symptom therefore of the first importance, as it enabled us to commence our treatment of the disease in its most tractable stage, and before it had materially destroyed the normal curves of the spine. This symptom was a spasmodic pain in the abdominal region, sufficiently well designated by the term *gastralgia*, although it was not confined to the stomach. A case had occurred since the last meeting of the Society which so

admirably illustrated this subject, that he might be excused for briefly alluding to it.

A child, four years of age, was placed under his care by Dr. Corson, of Norristown, Pa., presenting the following history: Rather more than twelve months ago, having previously been in perfect health, on being lifted by his mother one morning, taking him under the arms in the usual manner, he suddenly shrieked out with pain, and on being asked where he was hurt, he put his hand on the abdomen. From that day forward he was subject to constant similar attacks, generally produced at first by some sudden or forcible movement of the body, and often causing him to bend double as if with cramps of the abdominal muscles. He gradually emaciated, and soon began to give evidence of difficult locomotion, the right leg especially being affected. Dr. Corson having directed the attention of the mother to the spine as the possible seat of the trouble, it was closely watched, and not until the Sunday before he was brought to Dr. Lee did the deformity show itself. At this time he was having the attacks of gastralgia regularly every evening. The protuberance was in the lumbar region. *Secondly:* The fact, which he firmly believed, that the disease in question, although often accompanying the strumous cachexy, was not, as the text-books teach, essentially tubercular in its origin. And *Thirdly:* That the most rational and successful method of treatment was the employment of force in the antero-posterior direction, for the accomplishment of which the splint of Dr. Taylor, of New York, was the means best adapted.

Dr. Hartshorne said that he had read the work just presented with much interest. He considered the symptom dwelt upon by Dr. Lee as of very great importance, but was at a loss to know how it was to be distinguished from the pain accompanying ulcer of the stomach, in the earlier stages of the latter affection, before hæmatemesis had commenced. He would be much obliged to Dr. Lee if he would indicate the signs on which he relied to make this distinction. He thought it the more difficult, inasmuch as Dr. Lee had stated that the spinal gastralgia was sometimes produced by taking food into the stomach.

Dr. Lee remarked in reply, that while it was true that the abdominal pains accompanying spinal inflammation might be caused by the prehension of food, it was so only in rare cases. The presence of blood in the matters vomited, referred to by Dr. Hartshorne, would in such cases very soon decide the doubt, if any existed. But there were other points of distinction. The spinal pain was usually spasmodic in its character, causing the patient to shriek out suddenly, and often as suddenly ceasing. It was very often traceable to movements of the body, even in cases where it might also be caused by eating. It was rarely accompanied by vomiting. But probably the most trustworthy symptom was a stiffness of the lower extremities on first rising in the morning. This morning rigidity and difficulty of locomotion were generally present as soon as there was enough inflammatory action to produce the ventral pains, and the association of the two might be considered as convincing evidence of its existence.

Reciprocation of Medical Services. — Professors Dumreicher and Langenbeck, the former Austrian, the latter Prussian Surgeon-General, have entered into an unpleasant discussion as to whether the Prussian medical officers did or did not neglect the Austrian wounded after the battles in Bohemia. It is a matter of veracity, or perhaps the shield was looked at from different sides.

Correspondence.

ABORTION IN THE CHURCH.

To the Editor of the Medical Record.

Dear Sir—I was quite interested in the account given in your recent issues of the stand taken by one or two church journals against the crime of abortion. Every medical man, and every Christian, has reason to rejoice that the initiative has thus been taken, and that there is a chance of placing the enormity of this dreadful crime properly before the eyes of the clergy, as well as the members of their flocks. I do not wish to cast any reflection upon the character of true ministers of the gospel, for such should always be above suspicion, but there are some who unworthily assume the titles and responsibilities belonging to that profession, and who not only wink at the practice but who urge its committal upon their own wives.

Permit me, sir, to cite a case in point: A few weeks ago a well known clergyman in the district in which I reside called at my office for a confidential professional int rview, and in the course of our conversation he came at the subject, which was that of a proposal for aid in producing an abortion upon his wife. After I had sufficiently recovered my surprise at this demand, I expostulated with him and tried to use the usual arguments against the commission of the act, but, strange to say, while admitting the truth of my assertions, as he termed it, "on high moral grounds," he declared it to be his intention to have it done by some willing party upon whom he intended to call. It was a matter of expediency to him, he being, as he said, so peculiarly situated that a birth at the time it would be due would be the most inconvenient thing in the world. He was not loath to have a family, and he pretended to believe that the Almighty could protect his wife through the parturient act, and made quite a number of pretty little arguments in favor of his project. But what was his excuse? Simply this—He was to sail shortly as a missionary, and he did not wish to *have his wife confined on shipboard!*

I have no doubt that other medical men have similar experiences, but for myself I must confess that this was rather a startling one, as proving the deep root which this crime has taken among that class of individuals who should know and do better. It is this class particularly that may be benefited by the discussion of the subject in religious papers. This man has probably ere this been served, but I hope, if such be the case, that he will repent of his sin on the voyage, and make himself a fit teacher for the poor heathen.

Yours etc., H.

New York, May, 1867.

Responsibility of the Chinese Physician.—The physician is greatly responsible for his patients. If he fails to cure, the patient or his friend may prosecute him at once. If through any inattention or mistake he has caused the death of a person, he must pay the penalty—which penalty generally means the support of the family. If through a fatal medical blunder this happens—he is for ever afterwards prohibited from practising his profession—a regulation that might, perhaps, prove advantageous in other countries. Visits are never charged; they simply charge for the medicine used, and it is always on trust until the patient gets better—conditions not very favorable for large incomes and great wealth. —Dr. Wiley, *Cinn. Lancet and Observer.*

Obituary.

PROF. J. M. ALLEN.

DIED APRIL 7, AT LOWELL, MASS.

Dr. Allen was born in Princeton, Mass., in the year 1815, and, in early life, enjoyed only the advantages of a common school education in that quiet agricultural town. He entered Yale College in 1834. In 1838, he went to Philadelphia to prosecute medical studies and attend lectures. In 1840, he graduated at the University of Pennsylvania, and immediately became a teacher and lecturer on anatomy connected with a private institution. Afterwards he occupied for several years the place of Demonstrator of Anatomy in the Jefferson Medical College, and from there he passed to the Professorship of Anatomy and Physiology in the Pennsylvania Medical College, which post he held seven or eight years.

During this time he prepared and published the *American Medical Dissector*, a work which possesses great merit and is used as a text-book by medical students throughout the country. Close and continued application to professional duties as well as to scientific and literary pursuits, broke down his health and compelled him to suspend his labors. At this time he had a severe and lingering fit of sickness, from which his constitution never fully recovered. Some six or seven years ago he came to New England to visit his friends and recruit his health, making Lowell mainly his home. On account of his feeble state of health, he avoided all public labors and medical practice, except what incidentally came into his hands, and most of this was a gratuitous service for the poor, for whom his sympathies were always warmly enlisted, and by none (except his family and relatives) will he be so much missed or so long remembered as by this class. Here he was but little known, except to a few individuals and families who casually made his acquaintance or sought his professional advice. Being himself an invalid, he sought a quiet and retired course of life. On April 1, he was attacked with pneumonia, which, with organic disease of the heart, in a constitution already enfeebled, afforded a very small chance of recovery. He was confined to his room only three days, when death released him from his sufferings.

Medical News and Items.

PERSONAL.

Dr. Edwin Powell, of Chicago, has been promoted by the President to the rank of Colonel by brevet. The commission dates from the 13th of March, 1865, and was given "for faithful and meritorious services during the war."

CIRCULAR ORDERS, ETC., FROM SURGEON-GENERAL'S OFFICE.

Washington, D. C., *January*, 28, 1867: Circular Orders No. 1.—It is known that during the War of the Rebellion there were instances of primary amputation at the hip-joint for gunshot injury, performed at field hospitals, and not made the subjects of special reports to this office. With much difficulty the details of several such cases have been collected. It is believed that others may remain unrecorded. In order that the data of the office in relation to this operation may be as complete as possible, you are respectfully requested to report any facts, however slight, within your knowledge, in reference to cases of amputation at the hip-joint in the military surgery of the War of the Rebellion, bearing upon cases other than those enumerated at page 50 of Circular No. 6, Surgeon-General's Office, 1865.

By order of the Surgeon-General.

C. H. Crane,
Assistant Surgeon-General, U. S. A.

Washington, D. C., *April* 4, 1867: Circular No. 2.—Medical officers, and others interested in the progress of medical science, are invited to forward contributions to the Army Medical Museum, which is now prepared for their reception.

Besides interesting medical and surgical specimens, which will be forwarded as heretofore, the following classes of articles will be collected and forwarded by those medical officers who have opportunities for so doing.

1. Rare pathological specimens from animals, including monstrosities.
2. Typical crania of Indian tribes, specimens of their arms, dress, implements, rare articles of their diet, medicines, etc.
3. Specimens of poisonous insects and reptiles, and of their effects on animals.

Attention is called to Circular Order, No. 3, dated Surgeon-General's Office, April 3, 1867, a copy of which is herewith forwarded.

J. K. Barnes,
Surgeon-General, U. S. A.

War Department: Washington, D. C., *April* 3, 1687, Circular No. 3.—The following Order from the Acting Quartermaster-General, U. S. Army, is respectfully furnished for information of Medical Officers, U. S. Army:

Washington, D. C., *March* 25, 1867: Quartermaster-General's Office, General Orders No. 27.—Officers of the Quartermaster's Department, in charge of Government trains returning from frontier or other remote points, are authorized, upon the requisition of Medical Officers, to furnish transportation by such trains for collections of specimens for the Army Medical Museum, when such transportation can be furnished without injury to the public service.

D. H. Bucker,
Acting Quartermaster-Gen., Brev. Maj.-Gen. U. S. A.

By Order of the Surgeon-General.

C. H. Crane,
Assistant Surgeon-General, U. S. A.

Washington, D. C., *April* 20, 1866.—No. 4.—In view of the possible prevalence of Cholera during the approaching summer the following instructions are promulgated.

Every endeavor will be made by medical officers to prevent the introduction of Cholera from infected commands, or its conveyance from point to point, by a "quarantine of observation" upon all detachments of recruits or troops, arriving or departing from depots, posts, or recruiting stations, at or near which this disease prevails; prompt reports of its appearance in commands, either *en route* or in garrison; and isolation of all cases as far as practicable. In addition to the strictest hygienic police, enforcement of personal cleanliness, and thorough disinfection, attention should be paid to the quality of the water used for drinking and cooking purposes. When pure rain water cannot be procured in sufficient quantities, and the spring or river water contains organic impurities, it should be purified by distil-

lation, or the noxious matter precipitated by permanganate of potash. From half a grain to one grain of the crystallized permanganate (or its equivalent in solution), added to one gallon of water, should produce a decided pinkish hue, which disappears within twenty-four hours (if the salt has not been used in excess); the water should then be drawn off, and it is ready for use. Turbid water, such as that of the Rio Grande, Lower Mississippi, and its tributaries, should be filtered, or allowed to settle, before using. The deposit of impurities can be hastened by the addition of powdered alum in small quantities well diffused by stirring. It is always, but more especially in times of threatened danger of pestilence, the duty and privilege of medical officers to submit the practical suggestions of experience and professional knowledge for the protection of the health of troops, to their commanding officers; and the history of the epidemic of Cholera in 1866, shows that only by combined and untiring vigilance, energetic action, and rigid enforcement of hygienic measures, within reach of every commander, can we hope to avoid, keep in check, or eradicate this disease.

Besides the usual reports of sick and wounded, every medical officer in charge of Cholera cases will forward to the Surgeon-General's office, at the close of each month, a list of Cholera patients in the following form:

Special Report of Cholera Patients at . . . . . .

Month of . . . . . 186 . .

Name.	Nativity.	Age.	Rank.	Regiment.	Company.	Length of service in mo's.	Date of attack.	Date of recovery.	Date of death.	Remarks.

. . . . . Surgeon, U. S. A.

Successful methods of treatment and results of autopsies will also be communicated.

The senior medical officer at every post at which Cholera appears, will make a special report to the Surgeon-General setting forth any facts he may be able to ascertain as to the introduction of the disease, and especially those bearing upon its importation from infected points by recruits or others, or its apparently spontaneous origin at the post.

J. K. BARNES,
Surgeon-General, U. S. A.

PROPOSED REPEAL OF MAINE LIQUOR LAW.—The Maine or Prohibitory Law was called up in the Connecticut House of Representatives, on Thursday, and after much warm discussion, a resolution was passed instructing the proper committee to inquire into the expediency of its repeal, and the enactment of a license law.

VIS MEDICATRIX NATURÆ.—A correspondent of the Richmond *Dispatch* has seen in Fluvanna County, Va., a lady, 97 years of age, who, until quite recently, never was sick, and never took a dose of medicine in all her life. She enjoys even now the full use of all her mental and bodily powers.

MORTALITY AMONG THE SHEEP IN MICHIGAN.—Great mortality, owing to a low grade of fever and diarrhœa, is said to be prevailing in Michigan. The pathology of the disease has not been ascertained.

HOME FOR LITTLE WANDERERS.—The foundation stone of the new Home for Little Wanderers, organized by the Howard Mission, has been laid in the Bowery on the site selected. The house is to be eighty feet long and fifty deep, and will be large enough to accommodate seven hundred children, and will also contain a hospital for sick children, a day nursery, where mothers can leave their infants while at work out, besides having spare lodgings for homeless girls.

THE POPULATION OF LONDON, i. e. the whole area included in the circle of fifteen miles radius from Charing Cross, is estimated at 3,521,267 souls; 107,992 births and 80,129 deaths were registered in London last year, both numbers being above the average record, and the excess of births over deaths much less than the previous year. The mortality was at the rate of 26.5 per 1,000, which is two above the average of the last twenty-seven years.—*Medical Times and Gazette.*

THE SPRINGFIELD SOCIETY FOR MEDICAL IMPROVEMENT.—The *Boston Medical and Surgical Journal* calls our attention to an error in locating the above society in Illinois instead of Massachusetts. For this the journal in question has our thanks. When, however, it charges us with copying the item in regard to the Society from their columns, it is in error. The item was sent to us direct from one of the members of the Society who desired its insertion, and as no State was mentioned we had to guess at it. The idea of inserting "Illinois" to cheat the "enterprising and industrious friends" in Springfield of "the credit of their professional zeal" in the matter is simply preposterous. Our readers will please bear in mind that the Springfield Society for Medical Improvement is located in *Massachusetts.*

THE LYING-IN ASYLUM.—The forty-fourth anniversary of the Asylum was recently held, Mrs. Thomas Addis Emmett presiding. The proceedings were opened with prayer by Rev. Dr. Burchard, who afterwards made a forcible address. He spoke of the benefits conferred by the institution, and said that unfortunately the number of those who had actively supported it was yearly becoming less. The city could not, he said, afford to lose such an institution, and he urged those present to use their influence in securing an increased interest in the Asylum.

The Annual Report was then read, from which it appears that the total receipts of the institution during the year were $4,616 64, and the expenditures $3,900 34, leaving a balance of $716 30.

The Report of the Resident Physician, Dr. Sterling, shows the following facts: Number of confinements in the house, 104; children born, 104—males, 59; females, 45; stillborn, 4; the number of women who left the Asylum after their confinement in good health was 102; number remaining to be confined, 5; number of cases attended by district physicians, 269; total number, 379; whole number confined in the Asylum since its foundation, 3,332; attended by district physicians, 11,827; total, 15,159.

Addresses were made by Drs. J. P. Garrish and J. R. Wood, who spoke in eulogistic terms of the management of the Asylum, and the remarkably successful treatment of patients, after which the meeting adjourned.

SENSIBLE ADVICE.—We recently saw, upon a fence in the interior of this State, the advertisement: *Use Dr. H——'s antibilious Pills*, under which some irreverent wag had written, "*and prepare to meet thy God.*"

GERMAN HOSPITAL FUND.—The Ladies' Aid Society have recently donated $3,000 to the fund.

CHOLERA.—A case of Asiatic Cholera has been reported at St. Catharine's, Canada.

Original Communications.

CASE OF ABSCESS IN THE APPENDIX VERMIFORMIS CÆCI.

PROF. WILLARD PARKER'S OPERATION BY INCISION—RECOVERY.

By J. H. HOBART BURGE, M.D.,

SURGEON TO LONG ISLAND COLLEGE HOSPITAL, ETC.

Miss K. S——, aged 15 years, attended a party on Monday evening, March 4, 1867, and, although not feeling well, ate chocolate ice-cream. The next morning she was attacked with pain in the bowels, had two alvine evacuations, and vomited freely. The pain continuing, her mother gave her repeated doses of a morphine mixture which I had prescribed several months ago for an attack of colic in the same patient. The pain was not relieved, and I was called in the evening. She was of nervous temperament and exceedingly sensitive. I found her with knees drawn up, and abdomen so tender, that she made the muscles as tense as possible to resist any pressure that might be attempted. She referred the pain to the umbilical region. I ordered tr. opii camph. 3 i., to be repeated, if necessary, from time to time through the night. The first dose relieved sufficiently to produce sleep, yet upon waking the pain was renewed.

March 6th.—No relief; general tenderness of the abdomen, but most sensitiveness in right inguinal region. Prescribed mixture containing chloroform gtt. v. to each dose, repeat every two hours. Evening visit—patient has slept some; but still complaining. Fearing there might yet be some irritating matter in the bowels, I ordered an enema of hop-tea Oss., ol. ricini ℥ i. and tr. opii gtt. xx.

March 7th.—The injection was retained. Patient has slept some. Pulse, from commencement of attack, has been pretty uniformly 120. Repeat the injection without the laudanum, continue the chloroform mixture, and give tr. opii camph. 3 j. if there is any increase of pain. Bowels moved moderately.

8th.—Paregoric has been given but twice; relief partial; pain and tenderness more marked in right iliac fossa.

14th—Bowels have been moved every day moderately, since last record, and yesterday three times. Pain and tenderness partially controlled by tr. opii camph. 3 i. morning and evening, and at times aquæ camph. 3 i. every hour. Has, to-day, slight chills; pulse 130; tongue white and moist; skin slightly dry.

17th.—Bowels moved every day; pain and tenderness less. One teaspoonful of paregoric morning and evening has been sufficient to procure sleep; pulse has fallen to 90; skin and tongue moist. There is a firm mass in the right inguinal region, which is tender on pressure. Concluding that I had one of but two things to deal with—either a scybalous mass, still retained in the cæcum, or an abscess in the appendix—I gave hydrargyri submuriatis gr. vj., which caused a free evacuation, but made no impression on the mass. The tumor was not large, and no fluctuation could be detected.

18th.—Announced to the family the serious nature of the case, and called Prof. Willard Parker, who, upon hearing its history and examining the patient, advised an immediate incision. At my request he operated, while I administered chloroform. An incision was made, three inches in length, directly over the tumor, its central portion extending through the muscles and the fasciæ transversales. An exploring needle was thrust into the tumor, and at first there seemed to threaten a pretty copious hæmorrhage. It proved, however, to be mainly serum, and pus immediately followed. The wound was enlarged, a piece of lint introduced, and slippery elm poultice applied. After consciousness returned, sol. morph. (Magendie's) gtt. x. was given. Patient slept quietly for more than two-thirds of the time for the next thirty-six hours, generally two or three hours at a time. Has not cared for food since first attacked. Takes a little milk-punch, toast, and crackers.

22d.—Pulse, since operation, very uniformly 100; to-day, 112. Skin and tongue moist; no pain, no thirst. Has taken no medicine since the day of the operation. Abscess continues to discharge moderately, and incision looks healthy.

23d, 24th, 25th.—Morning, pulse 92; evening, 112. Appetite slightly improving.

26th.—Some uneasiness in stomach and bowels; at times amounting to pain. There is not and has not been any tympanitis; pulse a little hard. Patient did not rest as well last night; aqnæ camph. 3 i. every hour.

27th.—Had a small, natural passage last night; still feels uncomfortable in stomach and bowels. Ordered in the evening, an enema of warm water Oj., and fine salts 3 j. The patient resisted it so strongly that the nurse failed to give it.

28th.—Rested well, and is very comfortable to-day.

29th.—Pulse 88; discharge from abscess laudable pus only.

31st.—Pulse 80; had a small, natural alvine evacuation last night; wound granulating finely.

April 10th.—Bowels quite regular; wound nearly healed; appetite good; patient gaining strength rapidly.

THE MEDICAL USE OF ELECTRICITY.

By G. M. BEARD, M.D., AND A. D. ROCKWELL, M.D.

OF NEW YORK.

No. V.

PROLAPSUS UTERI.

Dr. Seiler, of Paris, published a work in 1860, entitled "*Galvanization par Influence*," in which he reported a number of cases of uterine displacement that had been relieved or cured by electricity.

In prolapsus uteri general electrization is very often of great service, chiefly by its tonic effects on the system at large, and on the walls of the vagina. All gynecologists will agree that prolapsus uteri is usually associated with relaxation of the vaginal walls, and also with general debility, and that whatever will give tone to the system and to the weakened parts must be of service.

Miss T——, an unmarried lady, aged 30, applied for treatment for falling of the womb of the second degree, from which she had suffered for nearly six months. Previous to the first symptoms of prolapsus, persistent leucorrhœa had annoyed her for some time, and had continued up to the day she came to us. She complained also of some menorrhagia, and this, together with the constant leucorrhœa, had deprived the vagina of its tone. These conditions, however, were evidently associated with no actual uterine disease; but her general health was quite feeble. If it were a case for electricity at all, it was plain that she needed its tonic influence. We commenced, therefore, with mild, general applications, increasing the strength of the current at each visit, as she was able to bear. At each sitting, also, the electrode was pressed for a few minutes against the os and the walls of the vagina. The beneficial

results of this course of treatment were soon observable. Her appetite, which had been capricious, became more rational, and her strength increased with marked rapidity. The vaginal walls seemed to gain tone day by day, until after the sixth application the uterus was restored to its normal position.

We shall merely allude to the other indications for the use of electricity, for if the general principle in regard to its tonic and corrective effects be true, then it is evident that it may be fairly tested as an adjuvant wherever such effects are desired. It has been used in surgery in the form of *galvano-cautery*, for discussing *tumors*, for stimulating *ulcers*, for hydrocele and chronic urethritis. It has also been used in *intermittent fever*, and with good results. In *incontinence of urine* associated with general feebleness, it often works very effectively.

Much has been said of its powers as a *galactogogue*, and some interesting results as well as failures have been reported. In *progressive locomotor ataxia*, or Duchenne's disease, this agent has not achieved very great results. In *epilepsy* we have sometimes found it to be positively and speedily beneficial, and sometimes it appears to be entirely inoperative.

But, notwithstanding the fact that electricity, employed in the manner we have described, is indicated in a wide range of diseases, it is as yet very far from being a panacea, even in the most skilful and practised hands. For some diseases it is found to be in no way adapted by our method of application, although a wider experience may teach us *that the fault lies in the method of administration and not in the remedy*. In the treatment of shaking palsy, we have uniformly failed to give the slightest relief; and in cases of paralysis, dependent on *persistent* lesions of the nervous centres, we do not expect to be of much service. But so difficult is it, even for the ablest diagnostician, to discriminate between the different forms of paralysis, that we usually make at least a few trials on most of the cases that are brought to us, in order to ascertain, if possible, by the electric test, whether there be any chance of relief. We are oftentimes agreeably disappointed by a favorable issue in cases that at first seemed to promise but little.

We have already stated that faradaization, as we employ it, does not seem to be adapted for cases of pulmonary tuberculosis the first stage. Dr. Bastings, of Brussels, has recently published a work, in which he claims to have cured twenty-five cases of phthisis by means of the galvanic stream, applied around, not through, the chest, for the purpose of increasing the muscular development. The theory of his treatment, as we understand it, is substantially the same as that advocated by Dr. Davis, in his recent work on "Conservative Surgery." The book is prepared with apparent fairness, and we shall endeavor, as occasion offers, to subject his theories to a practical test.

But there are certain temperaments and certain stages of disease that will allow only of very mild applications of electricity, where indeed unpleasant effects seem to follow, temporarily at least, unless the treatment be commenced with great caution.

Mr. F., sent to us by Dr. Fordyce Barker, complained of a kind of neuralgia of the neck of the bladder. He was a stout, well formed man, and in all other respects was in perfect health. The first applications were made with the positive pole on the lower part of the spine, over the lower part of the abdomen, and against the perineum, mildly at first, but afterwards with greater power. For a number of days after the fourth visit the patient complained of soreness of the muscles (a not unusual temporary effect at the commencement of treatment), and of general prostration, which annoyed him for several days. Such cases, in healthy individuals, however, are purely exceptional.

For the majority of patients even an overdose is only followed by a feeling of soreness that soon passes away.

Those who receive an application of too great power will not usually experience the prostrating effects before the following day; but even to this rule there are exceptions. In very aged persons, or those enfeebled by disease, we always begin with mild applications, and gradually increase the strength according to the indications, allowing intervals of several days between the visits. It should be remarked, however, that we have obtained some of our most successful results in cases that at first seemed to be injured rather than benefited. Occasionally, in those affected with digestive derangements, the first operation causes prostration and vomiting, that seems to clear out the system, and prepare the way for recovery.

We close with a few brief suggestions for the benefit of any who may be induced to study this subject for themselves.

1st. Get the best apparatus and become thoroughly familiarized with the details of its management. Much of the discouragement that has thus far attended experiments in this department has been due to the fact that it has been impossible to obtain any convenient, easily adjusted apparatus. The old-fashioned magneto-electric machines, where the electricity is generated by turning a crank, are to the last degree inconvenient, and it is not to be wondered at that those physicians who use them soon become disgusted with the whole subject. The electro-magnetic apparatus that we employ, and which we decidedly recommend, is manufactured by Jerome Kidder, of this city. It has a powerful helix, a very readily managed armature, and is run by the ordinary Smee's Battery. A moderate amount of experience will enable one to manage it successfully, and to keep it always in order.

2d. Make the applications *general*. *Localized electrization*, according to the method of Duchenne and his followers, is serviceable in paralysis, acute neuralgia, and kindred affections; but where a general tonic effect is desired, as in dyspepsia, rheumatism, amenorrhœa, chorea, constipation, anæmia, and in other diseases associated with deficient vital energy, *general electrization* is indispensable.

The modus operandi of general electrization is as follows:—Male patients remove their stockings and all their outer and under-clothing from the upper part of the body, and place their feet on the piece of copper to which the negative pole is attached, while the operator applies the positive, either the sponge or the hand (when the current passes through his own person), down the spine and over the vital organs. Ladies remove their dress and loosen their under-garments, and throw over their shoulders a shawl, or sheet, to prevent exposure. The most thorough form of application demands that the entire surface of the body should be gone over with some regard to order.

Special pains should be taken to avoid the scapula, clavicle, sternum, crest of the ilium and tibia (or when they are touched, to carefully graduate the current), inasmuch as these and other bony prominences are very sensitive to the electric current.

3d. Be prepared for the occasional occurrence of unpleasant or equivocal symptoms at the outset of a course of treatment. The soreness of the muscles, headache, and general depression, that are sometimes experienced a day or two following the first application, will soon pass away, provided the subsequent treatment be judicious.

Applications to the head should *always* be made with the hand, and should be very mild. Cases that begin unfavorably often result in the most complete cures.

For patients who are much reduced it is best to allow intervals of several days between each application, especially at the beginning of the treatment. In the majority of cases sittings may be held every other day, or when merely localized electrization is employed, every day.

4th. Let the first tentative applications be mild and of short duration, say from five to ten minutes, and increased in strength gradually as the patient is able to bear. Afterwards, the strength of the current, whether employed with the hand or sponge, should be as great as can well be borne. Let the patient be *comfortably uncomfortable.*

5th. For nearly all chronic affections the treatment should be persistent. While great and beneficial effects are often derived from two or three applications, a complete or approximate cure can only be achieved by continuance of the treatment, varying the strength of the current and frequency of the applications according to the progress which is made. Cases of paralysis of long standing demand a protracted course of treatment, even where there is no very serious lesion of the nerve centres. In many cases of paralysis, and in some phases of rheumatism, the improvement may be hastened by the use of the continuous galvanic stream.

6th. Although general electrization is indicated in a large variety of diseases, it is very far from being a panacea. It is a *tonic*, and it is to be employed on the same principles, and subject to many of the same limitations as are all other tonics, except that it is more rapidly and surely effective than any internal medication. If the system be below par, as a result of any chronic disease, or combination of diseases, then general electrization is indicated in conjunction with or prior to the use of iron, quinine, bathing, air, exercise, society, and all other tonic influences whatsoever.

But it should ever be remembered that it is *general electrization*, employed in the manner we have described, and not "electricity" or "localized electrization," that produces constitutional tonic effects, and thus cures disease.

The result of the treatment will depend as much on the skill and perseverance of the operator as upon the powers of the agent he employs. Success in this, as in all other departments of science, is reserved for those who, unswerved by prejudice and unbiased by theory, seek only for the knowledge that comes from careful, patient, and repeated experience.

914 Broadway.

The Reason why our Teeth Decay.—The reason why the teeth of people of later days are more decayed than were those of past generations, is, that we are now further from Nature's simple plan. Indeed, the terrible condition of the present generation may be said to be one of the penalties of civilization; and the decayed condition will increase in exact ratio with the luxuriousness of the diet. Dentists should discourage the general use of pickles, lemons, and other acid substances, and bring their patients as near as possible under the influence of the hygienic law. Another great cause of disease by the production of acids, is the fermentation of food lodging in the teeth after eating. The remedy for and preventive of this is cleanliness, absolute cleanliness. The doctor recommended the use of antacids with the brush. Solution of carbonate of soda, lime-water, etc., could be advantageously used three times a day for an indefinite period.—*Dr. Cushing (Dental Register).*

EXCISION OF THE ENTIRE OS CALCIS FOR CARIES.

By F. A. BURRALL, M.D.,

SURGEON TO THE NORTHERN DISPENSARY, VISITING SURGEON TO CHARITY HOSPITAL

William Keogh, born in the United States, of Irish parents, and aged eight years, was brought for the first time to my office, Oct. 8, 1866, from Jersey City, where he lived. I was informed by his parents that nine months previously he had been in the habit of standing for a long time upon the ice, and on one occasion he became much chilled, soon after which a swelling occurred beneath the left external malleolus, over the os calcis. This was opened by the attending physician and discharged purulent matter, which discharge continued to the date of his visit at my office. The patient had been under treatment at intervals since the commencement of the disease, but as is usual in caries of the tarsal bones, the malady progressed steadily, and amputation of the foot had at last been recommended as the only means of cure.

The general health of the patient was good. Although pale, his skin was not transparent, and his appearance not that of a scrofulous child. His parents were healthy and did not admit any strumous tendency, while his six brothers and sisters enjoyed good health.

The foot was somewhat inverted, apparently owing to an adhesion over the tendons of the peronei muscles at the outer malleolus, which prevented them from contracting. The integument was red and thickened, and the vicinity of the ankle much swollen. The lower portion of the foot still retained a marked healthy appearance. Pressure over the seat of disease did not cause much pain. A moderate purulent discharge flowed from three small openings on the external surface of the foot over the os calcis, and a probe passed into these, struck upon dead bone. This discharge had often contained osseous particles. There was good ginglymoid movement in the ankle-joint, but the foot was useless for walking.

The parents being extremely anxious that the foot should be saved, a tentative treatment (partly for the purpose of reducing the size of the parts surrounding the joint) was commenced, consisting in the firm application of a roller around the joint, the openings being left uncovered and dilated with compressed sponge. The poultices which had been in use were discontinued, and the syrup of the iodide of iron was ordered to be given three times daily. Under this treatment the joint became smaller; but there was no decided improvement, so that an operation was considered necessary. Dr. Gurdon Buck, who saw the case about this time, recommended that a free incision should be made upon the outer side of the foot down to the diseased parts, and the subsequent steps of the operation be regulated by the extent of the disease.

Nov. 1, assisted by Doctors M. H. Henry, J. C. Morton, and L. Weber, the patient was etherized and a horizontal incision made, extending from the inner edge of the os calcis, severing the tendo-achillis and going down to the bone, to a point opposite the calcaneo-cuboid articulation. A vertical incision led from this point to just within the sole, freely opening the calcaneo-cuboid articulation. While making this incision the scalpel struck a sequestrum which proved to be the loosened facet of the os calcis which articulates with the cuboid. This detached fragment was rough and bare.

The flap was now dissected downwards, and the os calcis was found suppurating and disintegrated, but still firmly held by its attachments. Partly by the cutting edge of the scalpel, partly by its handle, and partly by

evulsion, the bone was removed. The surrounding surfaces were in a healthy condition, with the exception of the cuboid, the cartilage of which having been partially removed during the operation, showed considerable vascularity of that bone. The synovial membranes between the astragalus and os calcis were uninjured, as well as the posterior tibial vessels and nerve. About twenty minutes were consumed by the operation. The peronei muscles and vessels were divided, but no ligatures were required. An examination of the removed bone showed that its shape was very much altered by carious disintegration. The cavity was washed with a dilute solution of liq. sodæ chlorinatæ and the edges of the wound united by silver sutures. A plaster of paris bandage was then applied from the upper part of the leg to the toes, so arranged as to leave the wound uncovered. On the wound were placed cloths containing ice, and directions left to cut the plaster band should it be found too tight, and substitute cold water for ice, if the ice proved unpleasantly cold. The heel was also supported by a diachylon strap.

No bad symptoms followed the operation. Union took place throughout nearly the entire line of the wound. The after treatment consisted in the use of the plaster of paris splint, an injection of the cavity with a dilute solution of liq. sodæ chlorinatæ twice daily, scrupulous cleanliness in the vicinity of the wound, water dressings, to which Labarraque's solution was also added, and good nourishment. On the 13th of November, the patient was able to go down stairs, the leg being suspended by a bandage which passed around the neck, and on the 18th of December all discharge had ceased from the wound, and the patient could walk with a slight limp. At present (March 7) the boy attends school, and walks and runs in ordinary shoes without difficulty. Scarcely any limp remains, and no apparatus has been necessary. The foot has become reduced almost to the size of its fellow; the inversion has disappeared, and the heel is resuming a natural appearance, growing firm and full. The tendo-achillis has become strongly united, and the movements of the foot, with the exception of eversion, which was very limited before the operation, are performed with facility. It is no exaggeration to characterize the result as very satisfactory.

Remarks.—Different opinions have been advanced as to the comparative merits of gouging or excision in disease of the os calcis. Dr. R. M. Hodges, in his work on "The Excision of Joints," uses the following language on page 189:

"For the removal of the os calcis, a regular operation is performed. The operations of Mr. Hancock and Mr. Greenhow in June and August, 1848, are claimed to be the first instances of this. But it was practised by Monteggia, of Milan, twenty-five years before, and also by Heine in 1834. It has now been performed many times for carious disease, and with tolerable success. Of the twelve cases reported by Mr. Greenhow, ten were successful, and in two amputation was subsequently required. The os calcis has also been excised for injury: four operations in the Crimea, in the year 1855-56, having all been followed by a favorable result.

"There can hardly be a doubt, however, that gouging is preferable to excision, and better applicable to this bone than to any other of the tarsus; its use in supporting the foot, and for the implantation of the tendo-achillis, may thus be retained, as a portion of the bone and the attachment of the tendon are preserved by the former operation, but can never be by the latter."

On the other hand, Dr. T. A. Holmes, in one of a most interesting series of papers on "The Treatment of Caries of single bones of the Tarsus and Metatarsus by Excision of the Entire Bone,"* says:

"What I wish chiefly to urge in the present communication, is the great advantage to be derived, in cases where the greater part of any of the tarsal or metatarsal bones is carious, from the removal of the *whole bone*. In a previous paper "On Excision of the Hip," I have pointed out as one of the great obstacles to success in that operation, the uncertainty which must always exist as to the extent to which the softened bone usually found in the acetabulum requires removal; that is to say, how much is incurably disorganized, and how much will recover if the other diseased parts are removed. In consequence of inevitable errors on this head, we often find that the exposed sections of bone take on the same carious action as the original joint-surfaces, and the operation is partially frustrated. The same is the case in the gouging operations practised on the tarsus. But in the case of the hip we have no choice; in that of the tarsus, usually we have. When only one bone, or only two contiguous bones, are affected, it is usually easy to remove the whole organ diseased; and when this is done—that is to say, when a wound is left which contains nothing but the soft parts and the healthy articular cartilages of the contiguous bones, I have never yet seen a case in which the wound did not heal soundly, and I believe permanently; and this is, therefore, the practice which I now always adopt in cases where limited disease of the tarsus affects only one bone to a considerable extent."

In Prof. Syme's "Principles of Surgery," page 703, it is stated:

"When the *os calcis* alone is affected, the disease may be extirpated by making a crucial incision on the fibular side, and then digging out the carious part with a gouge."

Dr. Morrogh, of New Jersey, successfully removed the whole of the os calcis, and a case of excision of the entire bone in an adult was published by Dr. Carnochan in the *American Medical Gazette* of June 1, 1857, which terminated successfully.

From the above references it is seen that, although gouging is considered preferable to excision when the disease is of moderate extent, yet Dr. Holmes regards with partiality a comparatively early removal of the entire bone. In Keogh's case, excision was the only alternative, as the bone was much disorganized. Necrosis was also present, for the facet of the os calcis which articulated with the cuboid had been separated in bulk and was a detached foreign body. The operation performed was the one recommended by Dr. Holmes in the papers to which reference has been made.

It would be difficult to lay the blame of the carious action in the case upon a strumous diathesis. The parents of the child are healthy, as they informed me were also their parents; his brothers and sisters also enjoy good health, and he is a hardy-looking boy. It is easier to explain the origin of the disease in the following manner:—As a result of exposure to cold and moisture (from standing upon the ice), the vitality of the external side of the os calcis, more superficial than the inner, and with a more limited vascular and nervous supply, became unusually depressed, the balance of the circulation disturbed, and a limited inflammation followed. Then pressure of the periosteum upon the inflamed part resulted in death of a portion of the subjacent bone, and subsequent ulceration, which from its seat was disposed to be of a carious nature.

An interesting feature in this case is the local charac-

* London Lancet, Jan. 21, 1865.

ter of the disease, which, although of nine months' duration, was limited to one bone, a clean cavity having been left by its removal.

These operations are rather rare. If unsuccessful, they may be followed by amputation of the leg; if successful, the remaining foot is much better than any artificial one, and in the present, as probably in many other instances, almost as good as its fellow.

DEEP CERVICAL TUMOR,

THE REMOVAL OF WHICH INVOLVED THE EXSECTION OF A PORTION OF THE INTERNAL JUGULAR VEIN,

WITH SOME REMARKS UPON

THE LIGATION OF VEINS IN GENERAL.

By WILLIAM WARREN GREENE, M.D.,

PROFESSOR OF SURGERY IN BERKSHIRE MEDICAL COLLEGE, AND IN THE MEDICAL SCHOOL OF MAINE.

On the 6th of April, 1864, Mr. Saunders, of Cheshire, consulted me with regard to a tumor upon the left side of the neck which he first noticed three years before. It had slowly and regularly increased in size, and for three months previous had been the seat of almost constant pain, while the whole side of the neck and head had been affected with a neuralgia sufficiently severe to deprive him, in a great measure, of sleep. For the past few weeks his appetite, flesh, and strength had failed, and he was very much depressed. The growth was partially covered by the sterno-mastoid muscle anterior, to which it was quite prominent. It was regular in outline, fluctuating, but tense and somewhat tender. It was *apparently* quite movable, and seemed about the size of a croquet ball.

The patient, understanding the liabilities, having elected an operation, was etherized; and with the assistance of Drs. Smith and Paddock it was performed as follows: The shoulders being elevated upon a block of wood, the head, falling backwards a little, was turned to the right so as to render the coverings as tense as possible, and an incision made through the skin and superficial fascia, commencing just behind the angle of the jaw, and extending over the most prominent part of the tumor downwards nearly to the clavicle. The deep fascia was divided upon a director, and the cyst readily exposed. Its walls varied in thickness at different points, and were so thin at the apex as to burst under the pressure of the fingers. The opening was immediately closed with broad-bladed forceps, and there was not sufficient collapse of the tumor to embarrass the dissection. As this was carried down towards the base, the small veins in its vicinity were found very much enlarged and tortuous. Three of these were tied. Around the lower portion of the cyst there had been plastic inflammation sufficient to blend its surface intimately with the sheath of the vessels, upon opening which the carotid and its accompanying nerves were found free, but the vein was so closely adherent to that part of the sheath blended with the sac, that it was impossible to separate it. So firm was the union that (the venous coats being evidently softened by the inflammatory process) in the very careful attempts to liberate it with the finger and the handle of the scalpel, the vessel ruptured, and there was a most alarming gush of venous blood. This was instantly controlled by pressure, and but little time was lost in applying a ligature to the cardiac side. Being now secure against the entrance of air, sufficient pressure was made by the fingers of an assistant, on the distal side, to control the hæmorrhage, the opening in the sheath extended, and the vein carefully isolated from the accompanying artery and nerves to a point above its attachment to the tumor where it was tied, and divided just below the ligature as it was also just above the first point of ligation. The portion thus exsected was two and a half inches in length. The dissection was carefully continued down to the transverse process of the third cervical vertebra, to which the pedicle was firmly attached. Around this a smooth, well waxed, hempen twine was tied, the tumor separated with the knife, and removed from its bed. But one artery was tied, and that a very small one. After all oozing had ceased and the parts were somewhat glazed, the flaps were united by interrupted silver sutures, the ligatures emerging from the lower angle of the incision. Reaction came on slowly, but in eight hours was well established. For four days he had considerable fever, and complained much of headache and giddiness. Was delirious occasionally. On the fifth day the fever abated, and from this date he slowly but steadily improved. The greater portion of the wound united by first intention. There was considerable purulent discharge, but of a laudable character. The ligature around the pedicle came away on the 19th day, the others having separated previously. On the 28th day after the operation he was able to walk to my office, and the next to ride home in the cars, a distance of ten miles. At this time the wound was entirely healed, and he only complained of some stiffness of the neck and of a strange feeling in that side of the head. These symptoms passed away in a few weeks, and he is now a stout, healthy man, able to carry on his business as a farmer with as much ease as ever.

Immediately after the operation, he commenced taking tr. ferri muriat. 3 ss., every four hours, which he continued all the time that he was under my observation, combining it with quinia after the surgical fever had passed. While this was active he got a saline cathartic preceded by a mercurial, veratrum sufficient to control the heart's action, Dover's powder q. s. to procure rest; cool, effervescing draughts, etc. Beef-tea and gruel for the first five days, after which he was allowed milk, steak, chicken, and eggs, in moderate quantities.

In common, I suppose, with all my professional brethren, I was taught when a student, both by preceptor, professors, and the text-books, that the ligation of veins was a most hazardous procedure; and so emphatic and oft-repeated were the warnings given that I became thoroughly impressed with the idea that so great was the danger of pyæmia as the result of any such interference, that it was only justifiable in cases of extreme emergency, and for several years my practice was in conformity with this doctrine.

Of course when we ligate any vessel we desire and expect a certain amount of inflammation, being only anxious that it shall be of a character consistent with the exudation and complete organization of plastic material. In various conditions of impaired nutrition, and especially in toxæmia, we may fail to secure this result and have instead a purulent, or, what is much worse, an ichorous exudation, which, if it finds its way into the general circulation, seriously aggravates the toxæmic condition; but I doubt very much whether any valid reason can be given why this unfortunate form of inflammation *should* attack a ligated vein rather than a ligated artery, or whether a candid review of the experience of the profession would establish this *as the fact. If such inflammation occurs*, then the ichorous pus is much more likely to reach the general circulation and produce its deleterious results, if formed within a vein than if within an artery. For in the first it

mingles with the enlarging stream, and flows inwards without obstruction until it reaches the portal or pulmonary capillaries, whereas the current in the arteries is forcibly towards the surface; and thus we are more likely to have superficial abscesses as the result of arteritis, and visceral as the result of phlebitis; but that this form of inflammation is more likely to *occur* in veins than in arteries I very much question. I do not believe that *ligation* adds to the danger of pyæmia in the case of a *wounded* vein, or that any other than plastic inflammation follows in a healthy condition of the blood; always presuming, of course, that no poison has been communicated to the wound during the operation. In septic states of the blood all operations are dangerous, and those upon veins especially, as for the reason above stated, but in case of a wounded vein I do not believe that the *ligature* adds to the danger in any condition of the system. My opinions upon this subject have not been formed without much thought and observation. I have now ligated the internal jugular four times. Once in a case of attempted suicide, once in case of a deep seated cervical tumor removed before the class of 1866, in the Medical School of Maine, again in the removal of a bronchocele last summer, which case was reported in this journal, and in the case of exsection here recorded. In none of these were there any untoward results. I have ligated the femoral vein after amputations of the thigh in six instances. Four made good recoveries, and two died within a few hours after the operation. I have once ligated the axillary vein in a shoulder-joint amputation with good recovery. I have repeated the same procedure upon the anterior and posterior tibial veins with no ill effects. In many ligations made for varicosities of the saphenous and spermatic veins, for the cure of hæmorrhoidal tumors, "aneurism by anastomosis," etc., I have never seen any of the results of which I stood in so much fear years ago. If I have been more fortunate in my cases than some others, my experience is not so exceptional as to fail in demonstrating, at least to my own mind, the comparative safety of the operation. I am confident that in several instances, by thus saving a small amount of blood, I have turned the trembling scale in favor of the anæmic patient. I am equally confident, too, that years ago I lost patients that might have been saved, simply from reluctance to "tie veins." Frequently have I seen excellent surgeons, after an amputation, tie every bleeding artery with all haste, and hesitate to arrest by the same means the fatal loss of a few drachms or ounces because it came from a vein. I have no doubt that many lives were thus sacrificed during the late war.

PITTSFIELD, MASS., May, 1867.

PROF. BILLROTH.—After a long discussion over the various candidates, Professor Billroth, of Zurich, has been called to the chair of Surgery in the Vienna University, made vacant by the death of Professor Schuh. The *Medicinische Zeitung* remarks that there is but one voice as to the propriety of the choice. Before called to Zurich, Professor Billroth was an assistant to the famous Langenbeck in Berlin. He has written a work on Surgical Pathology and Therapeutics, which has reached a second edition. Pitha, Dumreicher, Patruban, Ulrich, Dittl, and Lorinser, together with the last acquisition, are now the surgical teachers in Vienna, who assist in maintaining the glory of that medical school which has so long enjoyed the highest reputation. There is perhaps no place in Europe where so many advantages are brought together for medical study as in Vienna.

Original Lectures.

AN INTERESTING CASE OF

VESICO-INTESTINAL FISTULA: DISCHARGE OF ASCARIS LUMBRICOIDES PER URETHRAM.

BEING REMARKS MADE ON THE PRESENTATION OF THE SPECIMEN TO THE N. Y. PATHOLOGICAL SOCIETY,

March 13, 1867,

By E. KRACKOWIZER, M.D.,

OF NEW YORK.

MR. PRESIDENT—I am going to show a specimen of great interest and rarity. Three or four weeks ago a medical friend in Schenectady informed me of a patient of his who had all the leading symptoms of vesico-intestinal fistula. I wrote to have him sent on to me, and he arrived here on the 25th of February. I gave him a little rest, and, as the case was to me quite an extraordinary one, I instituted as close an examination about the history of his life as I well knew how.

He was twenty-eight years of age, of medium size and strength, and of healthy parents. He did not know that anything had ailed him up to his eighth year; he was quite positive that up to that time he had no considerable sickness that had attracted his attention, or that was retained as important in the memory of his parents. When he was eight years old, and while on the street, he felt a queer sensation at the end of his penis, as if he desired to pass water. He made an attempt to do so, but without success. On looking down at the penis he discovered something protruding from the opening of the urethra, which he grasped with his fingers, and pulled it out. It proved to be a worm. He says it was still living. It was not preserved. Before that time he had no inconvenience from the bladder or bowels, except that he never remembers having had well formed solid stools, but always had two evacuations daily, which, although liquid, were of natural colour. From that time forward, he would have occasionally, at intervals of several weeks or months, a queer sensation about the penis or perineum, a little scalding sensation in passing water, and an inclination to urinate a little oftener than usual. This would last a day or two and then pass off.

At ten years of age he emigrated to this country, and when on board the vessel he experienced the same peculiar sensation which he had two years before, and in trying to pass his water a worm appeared at the head of the penis. The worm was extracted by his parents, and it is not known whether it was living at the time or not. This worm was not preserved. Seven years ago he again passed a worm from the urethra. This worm he put in a bottle with alcohol, and kept it. It was shown to me. It is an ascaris lumbricoides, between five and six inches long. A few days after that he noticed, for the first time, that a gritty substance passed through his urethra. He showed it to his physician, who did not express a decided opinion of its nature. But the patient had no doubt that it consisted of several seeds of whortleberries. The urine remained clear all the time. He did not have any more inconvenience, except perhaps at longer or shorter intervals, little unpleasant sensations along the urethra and perinæum; in fact, he was well enough four years ago to enlist in the army under Burnside's command. He was also under Hooker, and participated in the battle of Fredericksburgh, and in the first battles of the

Wilderness. He made forced marches with the army of the Potomac, participated in the battle of Gettysburgh, and, having there received a flesh wound in the leg, was transferred to a hospital in Baltimore. While there, he experienced some difficulty in passing his water, and voided some substances which appeared to be the seeds of berries. He was then discharged from service—more, however, on account of the wound of his leg than his urinary trouble. He returned to his home in Schenectady, and was well enough a year and a half ago to get married. Soon after this event, however, his urinary trouble increased upon him, and all the rational symptoms of stone in the bladder presented themselves. The passages from his bowels were always from that time liquid, abundant, and frequent. When he had a desire for a passage from his bowels, he had no control over himself, but was compelled to obey the summons immediately. These evacuations presented a very evident urinary odor, and sometimes consisted almost entirely of urine. The trouble in the urinary organs continued to increase; and he not only had all the symptoms of stone, but, superadded to these, there was no urine passed per urethram for days. Instead of this natural passage, there was great urinary tenesmus, followed by the voidance of mucus mixed with blood and shreds of coagulated fibrine, as we are wont to see it adhere to inflamed mucous membranes. His sufferings then became constant, yet they did not have much effect upon his constitution; he grew, it is true, somewhat thinner, but he never had any fever, and his appetite was good. He suffered principally at night in having his rest disturbed by the desire to evacuate his bowels, and also with urinary tenesmus.

When he came here I first satisfied myself concerning the character of the alvine evacuations. They were mostly derived from the secretions of the bowels, but they unmistakably contained urine. While he was here, he did not pass any water until the third day, when about half an ounce of perfectly clean urine was voided, at the bottom of which settled a moderate sediment of muco-purulent matter.

I regret that no microscopic examination of this urine was made with a view to determine the condition of the kidneys. I was prevented from examining it the first day, and the next day it was so much spoiled that I could not make anything out of it.

On the first of March, I had him put under the influence of chloroform, and went to work to make a systematic examination of his case. On introducing a steel sound I at once struck a hard substance; but I was in doubt whether I had a large single stone or several smaller ones. Immediately on introducing the sound, the beak passed over a very rough substance, exciting a grating sensation; and when introduced further into the bladder, it struck a smooth surface of considerable extent. The grating sensation occasioned by this procedure could be perceived by those standing next to the table. By making a rotatory movement of the sound, it seemed as if the smooth-faced stone slipped from one side of the beak to the other.

The next thing to determine was the connexion between the bladder and intestine. I suspected that this connexion must be between the smaller intestine and bladder, as there never had been the least show of any broken-down fœcal matter in the evacuations; they were, on the contrary, always liquid; and when they were allowed to stand, a bran-like sediment from epithelium and mucus, stained with bile, settled at the bottom of the vessel.

Moreover he never passed any flatus per urethram, an occurrence so characteristic, where the fistula exists between the bladder and the large intestines.

In order to make out a direct connexion between the bladder and gut, I thought it well to inject some colored substance into the organ and watch the effect There being no other available coloring substance at hand, I employed some wash-blueing, under the impression that it was composed of the cyanuro-cyanide of iron. I made a dilute solution of this, and while the anus was distended, I injected twelve ounces into the bladder; but when I opened the stopcock of the catheter so as to allow the liquid in that organ to escape, none came. The injection then must have left the bladder immediately after being injected; it seemed strange that none came from the bowel. An examination was made as high up as it was possible to make it, while the anus was distended with Sims' speculum, but no opening into the gut was discovered; no liquid was seen to dribble out from the walls of the rectum, nor did the finger reach anything to determine the existence of a fistula; in fact the mucous membrane of the rectum seemed so far perfectly normal.

I charged the attendant to mark particularly when colored stools should appear. The injection was made at one, and at three the first passage came, and several others at intervals afterwards; all of these were separated one from the other as soon as voided, but no color was found in any. This circumstance at first appeared strange, but when I afterwards learned that the blueing was composed of indigo simply, I explained the non-appearance of color by the rapid bleaching which that substance underwent in contact with the ammonia, the presence of which in the stools was easily detected by the smell. To be sure that this explanation was correct, I filled a tumbler with a recent fluid exacuation from the bowels, and added a small quantity of the washing blue. The bluish color which it imparted to the liquid disappeared in a few minutes, leaving the color as it was before the addition of the washing-blue.

Two days subsequent to this, I took the common writing ink diluted, and injected six ounces of it into the bladder. The stopcock of the catheter being opened as two days previously, no fluid escaped from its extremity, but about ten minutes after, however, the patient had a stool which showed some of the color; in the course of two hours more another stool was colored nearly as dark as the injection itself; in two hours more another stool contained the color, but not so intense, and four hours after the injection the evacuation had its usual brown appearance. This fact corroborated the opinion which I had previously held, that the fistula was high up, probably between the small intestines and bladder. This being the case it was impossible to devise any rational plan to treat the fistula, but the only indication to fulfil was to relieve the patient of the stones in the bladder.

While the patient was under chloroform I could feel a stone behind the prostate, and somewhat overlapping the upper and posterior part of the gland.

Four days after the first examination, and two days after the second injection, the operation was made in the usual manner by the lateral incision. As soon as the prostate was incised, the staff was withdrawn. When I afterwards introduced my finger I at once felt, as I thought, small rough fragments in the wound, which I grasped and removed. In the bladder there were found in all nine stones, five large and four smaller ones.

After the bladder was emptied, my attention was directed to the finding of the vesical entrance to the fistula: I discovered towards the right and a little above, as I thought, of the trigonum, a funnel-shaped recess with a concave, prominent, upper border, with the

lower border slanting off towards the trigonum Lieutaudii. I tried to introduce a probe into this hole, but was unable at first to do so, and fearing that I might do damage to the parts in any further attempts, I desisted.

The patient after the operation felt greatly relieved. and went on for the first three days very satisfactorily, The only thing that I did not like was his listlessness; he was, however, perfectly rational and had no fever. During this time all his water passed through the wound. At the end of the third day he had fæcal evacuations which were nearly liquid.

On the fourth day he had quite a large stercoraceous evacuation from the bowels, of almost pultaceous consistency. Its odor and color were normal.

On the fifth day, he seemed even more drowsy; his pulse was high and feeble, he had felt chilly several times the preceding night. The skin felt rather cool, the tongue dryish. The respiration was normal. He complained of sharp pain in the hypogastrium. There was no tympanitis, in fact the abdominal walls felt very rigid, a condition hardly ever wanting in such who for urinary tenesmus have had the muscles of the prelum abdominale constantly taxed. The wound at the perinæum looked healthy, and the urine dribbled from it as from the day of the operation. He never vomited, and although the pain was bearable under moderate doses of opium, he grew weaker and weaker during the day, and expired March 11, at one o'clock A.M., five and a half days after the operation.

The post-mortem was made twelve hours after death. On opening the abdominal cavity, and throwing back the omentum, all the contents of the abdomen, as far as they could be seen, looked perfectly natural; there was no injection of the capillary vessels of the peritoneum except near the caput coli, but there was no exudation. On pushing back the small intestines, which brought the cæcum, sigmoid flexure, and entrance to the pelvis into view, the manner in which the fistula was established was at once explained. The vermiform process was seen to dip down straight over the rim into the pelvis, and be attached to the posterior and lateral aspect of the bladder by old adhesions, which in their turn spread towards the right side of the rectum, and strong bands of old adhesions passed from the sigmoid flexure towards the parietal peritoneum on the left side, showing that extensive pelvic peritonitis had occurred at some time during his life. By compressing the lower end of the ilium, and making pressure upon the caput coli, intestinal gases could be thrown into the bladder.

While handling the abdominal organs, three or four ounces of a well colored, thick, and odorless matter oozed up between the bladder and rectum. I did not see the exact spot whence it came, but had no doubt that it came from an extra-peritoneal abscess that had burst in the peritoneal cavity low down in the pelvis by the post-mortem handling of the parts. With a view not to spoil the specimen, while I took out all the pelvic viscera with the perinæum, anus, and penis below, the cæcum, with the end of the ilium, and a goodly portion of the S. Romaum above, I was very careful to get the peritoneal lining of the small pelvis intact. I divided the peritoneum by a circular incision along the rim of the pelvis, and peeled it off from the surrounding connective tissue. In doing so there were found in the areolar tissue of the cavity of the sacrum three or four small abscesses, none containing more than a thimbleful of creamy yellow, inodorous pus. The iliac and hypogastric veins with their branches contained liquid blood, and there was not the first beginning of a thrombus in any of them.

All the parts in their connexion with the kidneys by the ureters being spread on a table, the vermiform process was found adherent not by its extremity, but about three-fourths of an inch from it.

The bladder being split open in front by a longitudinal incision, did not show a thickening of its walls. Its mucous membrane was of a bright slate color, and moderately congested. At the neck of the bladder was seen a large, sinuous ulcer, nearly encircling its whole circumference, and deeper on its left side. In this, probably, the four rough, small calculi were lodged, and if so, it is accounted for why the beak of the instrument at times encountered some difficulty in entering the bladder, and why on this spot an unusually harsh, grating sound was produced.

The posterior angle of the cut in the prostatic portion stops just short of the anterior ragged border of this ulcer. The wound from the operation is smooth in its whole extent, and leaves about one-eighth of an inch of the left lobe of the prostate gland undivided. Nowhere in the neighborhood of the wound, or exteriorly to the capsule of the prostate, or in the connective tissue between the fundus of the bladder and the rectum, the least trace of infiltration of urine, or sloughing, or an abscess can be found.

One inch above the entrance of the right ureter into the bladder, a smooth-bordered opening is seen, admitting readily the end of a conical elastic bougie, which enters at once in the vermiform process there where it adheres to the body of the bladder. By giving the bougie an upward and outward direction, its end emerges after having trans-coursed the vermiform process in the cavity of the cæcum.

About one-eighth of an inch below this hole there is another, smaller, circular opening, which does not communicate with the vermiform process, but ends blind at the depth of a couple of lines.

The mucous membrane of the large intestines, from the cæcum down to the anus, has not undergone the least change from the urine.

The kidneys were somewhat larger and flaccid. Their capsules peeled off readily, leaving here and there small shreds of the cortical substance adherent to them. The surface of the kidneys was not smooth, but puckered in consequence of irregular depressions, caused by shrinkage of the cortical substance from atrophy on different spots.

On cutting them open, the cortical substance was seen reduced in bulk, forming here and there only a thin layer over the base of the pyramids.

On the surface of the left kidneys there was one small abscess, the size of a small hempseed, containing thick yellow pus.

The calices and pelves of both kidneys were dilated, those of the right kidney more so than those of the left one. Their mucous lining had a lurid port-wine color, which, on closer inspection, was seen to be produced by a rich arborescence of the smaller blood-vessels. The pelves held in their cavities a small quantity of turbid, floccular urine.

The peritoneal lining of the pelvic cavity was found in its whole extent fully intact, its surface smooth and glossy. There was nowhere a communication by ulceration or by an artificial rent with the subjacent connective tissue.

I have stated above, that along the sacrum there were in the extra-peritoneal connective tissue three or four small abscesses. They were filled with as much matter as they could hold, and nowhere else could a cavity be detected of a size to contain three or four ounces of matter that welled up from the bottom of the pelvis during the progress of the post-mortem examination, even if a communication between the peritoneal

sac and its surroundings had existed. But there was no lesion of the peritoneum, and its surface was just as normal as could be seen when it is not the seat of morbid action.

I cannot escape then the conclusion that the matter was the secretion of the peritoneal surface itself.

Although the patient was rather drowsy after the operation, and the kidneys were evidently the prey of pretty far advanced Bright's disease, yet there were no well marked symptoms of uræmia. But the symptoms of pelvic peritonitis, coming on rapidly on the fifth day after the operation, were well pronounced.

If I take in connexion with them the scattered abscesses in the sacral region, and the small abscess in the left kidney, the least improbable explanation seems to me to be, that pyæmia commenced on the fifth day, establishing purulent depots on the enumerated localities.

That the peritoneal surface appeared normal, notwithstanding the purulent secretion, seems surprising, but not more so than in other cases of pyæmia, where we see large purulent secretions in the joints establish themselves in the course of a few hours, and yet the post-mortem fails to detect the least injection, the least roughening of the synovial membrane, the smallest shred of fibrinous exudation, the least erosion of the incrustating cartilage.

Several other interesting questions come up in connexion with this case for solution. In the first place, at what time did this connexion between the vermiform process and bladder take place? Now, we have evidences of the existence of quite an extensive peritoneal inflammation existing before the last illness; here you have small bands from the side where the fistula is to the rectum, here others between the rectum and bladder, and from the sigmoid flexure there were even larger and stouter bands running towards the peritoneum. He is very distinct in his statement, that he never had any trouble, that he had never been "laid up" until the time I refer to, and his parents were unable to recollect any severe illness in his infancy; the first thing wrong that was noticed was the appearance of the worm per urethram. I do not think it impossible, that at a time considerably antecedent to the appearance of the worm, he passed through a pelvic peritonitis, which fixed the vermiform process on the lateral posterior aspect of the bladder, and that later a small foreign substance lodged there, caused irritation and inflammation, and established a communication with the bladder by ulceration. It is well known that these local peritoneal inflammations do sometimes occur, and do no more for the time than agglutinate adjacent parts, and the physician is not unfrequently surprised by the explosion of a fatal peritonitis, starting from a subsequent ulceration.

The next question to decide is as to the time when this fistulous connexion between the vermiform process and the bladder took place? Most certainly it has existed since his eighth year, for then the first worm was voided from the bladder. But, how is it that he did not suffer from this communication before, even had it then existed? I think the true explanation is this:—The vermiform process, by its adhesion to the bladder, was pretty tightly stretched. The communication with the bladder was not at its extremity, but about three-quarters of an inch from it. The fistulous track in this manner had a perpendicular direction towards the axis of the processus. Moreover, the inosculation between the opening in the vermiform process, and the opening in the bladder, was not immediate, but the fistulous track between the two cavities had an appreciable length. In fact, when the bougie was introduced from the side of the bladder in the vermiform process, in a direct line, it was there arrested, and it was necessary to give it an outward and upward turn to carry it on easily through the vermiform process into the cæcum.

It will be perceived that all these circumstances cooperated to establish a valvular occlusion, which never by the fluid contents of the bowels, and only accidentally and occasionally by solid bodies, like worms, seeds of berries, was overcome.

As long as there was no impediment in the bladder, by which the voiding of the accumulated urine per urethram was made difficult or impossible, the said valvular arrangement at the fistula set itself against a regurgitation of the urine filling the bladder into the vermiform process.

The occasional intrusion of foreign bodies from the gut in the bladder at first happily was got rid of by their immediate expulsion per urethram.

But when once stones in the bladder commenced to form (undoubtedly by such erratic blocks from the bowels furnishing the nuclei), this fortunate coöperation for a valvular occlusion was disturbed, and the order of things indeed reversed.

When the voiding of the bladder became difficult, partly by the mechanical occlusion from the stones, partly by spasmodic contraction at the neck, the urine accumulated in the bladder, being under equal pressure from all sides by the action of the detrusores vesicæ, sought an outlet where there was the point of least resistance. And this was indeed there where the entrance to the vesico-intestinal fistula was located. In point of fact the fistula became a vicarious urethra, through which the bladder expelled the urine as it dribbled down from the ureters.

So it is explained, why the last one and one-half years, since the urinary trouble commenced, never any fluid secretion from the bowels appeared per urethram, and why only small quantities of urine, sometimes only in intervals of three to four days, passed by the act of micturition. It was mainly forced into the bowel, and there produced by its irritation an abundant secretion, and a more rapid contraction, with a view to expel the contents of the viscus. He always passed large quantities from his bowels, and during all the time he was under my observation he never passed less than two chamber-potfuls in a day; of this probably about two pints was pure urine.

The next question, and the most important one, is this:—Could he have been relieved if the operation for stone had succeeded? If the complications—Bright's disease and ulceration of the bladder, which I look upon as the disposing cause to the fatal pyæmia—had not existed, there is no reason why the operation of lithotomy should not have been successful. If it had been so, I do not see why the patient should not have had a quiet time again, just as much as he enjoyed from his eighth to his twenty-sixth year, when stones in the bladder commenced to form.

That any rational plan could be devised to close the fistula I do not believe.

As objects of surgical interference, cases of intestino-vesical fistula must be divided into two distinct groups.

The *first* group, comprising cases in which the fistula exists between the bladder and the rectum, and can be seen and reached, permit surgical treatment.

Of the *second* class, where the fistula exists between the bladder and any section of the intestines down to that part of the rectum which already receives a peritoneal investment, I think it must be said that it is beyond the reach of art.

First, the exact situation of the fistula must always

remain rather a matter of surmise, although the statistics indicate the cæcum as that part of the intestines which, by its not uncommon lesions, is most frequently the organ implicated.

But even granted that the exact site of the fistula could be diagnosticated, how could it be attacked except by opening the abdomen, detaching both viscera from each other, and closing each fistulous opening separately with sutures? That such a procedure has the mark of fatality broadly stamped on it, it is unnecessary to dwell upon.

I refrain, too, from criticising the fantastic plan of a French surgeon (Barbier), who proposes to make a temporary artificial anus at the cæcum, and to introduce through it a metallic tube, reaching somewhat above the valvula Bauhini, through which the fæces from the ilium would be led past the fistula, which, ceasing to be the conduit of stercoraceous matter, might then close. After which the artificial anus might be closed also. The objections are so manifest, that I forbear to enter on their enumeration.

Quite distinct in scope and technicism from Barbier's, is the plan to make an artificial anus for the relief of vesico-intestinal fistula, pursued by Pennell* and T. Holmes†. Both these surgeons had to do with cases in which the intestinal entrance of the fistula could not be detected by rectal examination. But both cases showed symptoms which made it probable that the intestinal end of the fistula was below the region in which, by Callisen-Amussat's operation, an artificial anus is established. Both these gentlemen succeeded in leading the contents of the bowels out through an artificial anus in the left lumbar region, so that they could no more engage in the fistula and reach the bladder. In Pennell's case the patient did well, and lived for many years. I am not able to find out whether the fistula healed and the artificial anus closed. In Holmes's case, the patient was entirely relieved—for better than one year, I believe—from all the symptoms consequent upon fæces getting into the bladder; when these very same troubles reappeared, and the patient succumbed. The autopsy revealed the fact, that some time after colotomy by adhesion and ulceration a new fistula had formed, between the cæcum and the bladder, the deleterious effects of which, of course, could not be warded off by the artificial anus in the left lumbar region. The specimen was shown by T. Holmes in the London Pathological Society.

Although vesico-intestinal fistula is one of the rarer lesions, yet there is a goodly number of cases on record. But cases in which by it the possibility arose for intestinal worms to get into the bladder and be expelled per urethram, are exceedingly scarce. C. Davaine, in his "Traité des Entozoaires et des Maladies Vermineuses," Paris, 1860, has collected only 14 cases.

In two of these the worms reached the bladder by a vesico-rectal fistula.

In three cases the history is quite incomplete.

In one case it is mentioned that death was imminent.

In one case no post-mortem examination was made.

In five cases it is mentioned that the troubles diminished or ceased after the expulsion of worms. In two of these cases the relief seemed a lasting one. If we look at them by the light which our case furnishes, I think we may greatly doubt that the fistula had healed radically.

In only two cases the post-mortem result is reported.

The case of Dr. William Kingdon (*Med. Chirurg. Review*, July, 1842) bears such a striking similarity to mine, that I think it interesting to re-state it here:

A boy of seven years, at the commencement of the year 1836, suffered from the retention of urine for more than eight days, after which an ascaris lumbricoides presented itself at the meatus urinarius, and was pulled out by the child himself. One year afterwards the same thing occurred, and the mother extracted a worm from the urethra. Worms presented themselves successively at the opening of the urethra six months later, then in October, 1838, and in January and April, 1839. The passing of several worms per anum, violent pains in the region of the bladder, purulent urine, which afterwards passed with the stools, high and constant fever, transient loss of sight, and extreme exhaustion, were the leading symptoms, until death occurred, November 15, 1839.

Post-mortem Examination.—The vermiform process, instead of occupying its usual place, dipped down in the small pelvis, and about one inch from its extremity adhered closely to the upper and lateral portion of the bladder, a little above the junction of the ureter with the bladder. The bladder itself was small and contracted around a hard body that was recognised as a stone, one and a half inches long and two and three-fourths inches in circumference. The walls of the bladder were very much thickened, and opposed themselves almost entirely to the passage of the urine in the direction of the urethra. The mucous membrane of the bladder was ulcerated on two spots, and in a direct line with the orifice of the ureter, and a little above it were two fistulous openings, separated by a very narrow spur, which communicated with the interior of the vermiform process. Both ureters were very much enlarged, and both kidneys, more voluminous than normal, were so completely filled with pus, that hardly a trace of healthy tissue remained.

Dr. Kingdon divided the stone with care, and found in its centre a large pin. The stone had not been recognised during life.

Description of the Stones.—There were five smooth, and four rough ones. Dr. L. Voss, who assisted at the operation, tells me there was a very small fifth rough one, which was lost. The smooth ones had a chalk-white color; the largest was one and a half inches long, one and one-fourth inches wide, and one inch thick. It was oval, and only one side showed a little evenness, from attrition. The other four smooth stones, of which the smallest was only half an inch long and about three-eighths of an inch in width and thickness, while the remaining three were of intermediate size between the smallest and largest—had all originally a round or oval shape; but each one had the sphericity broken by two planes meeting at a right angle, caused by the grinding of the stones one against the other. The four stones, by putting them together, the corresponding planes facing each other, gave evidence that their relative position must have been all but permanent. The larger stone must have lodged on top of this cyclopic masonwork.

The four rough stones were quite small; but each one was studded on its surface with warty protuberances. Each two formed a set in this manner—that each stone offers a small polished surface that corresponds most exactly with a similar surface of its mate. The fit was as perfect as between an axle and its box. This circumstance makes it evident that each set of two stones had an independent, well secured spot in which they were held so fast that only the most insignificant sliding motion between each two was permitted. The ulcer at the neck of the bladder with the larger excavation

* A case of stricture of the rectum, wherein an artificial anus was successfully established in the lumbar region. By J. Wilson Croker Pennell, *Med. Chir. Transactions*. 1850. Vol. 33.

† A case of lumbar colotomy, successfully performed for the relief of vesico-intestinal fistula. By T. Holmes, Ass. Surg. St. George's Hospital, London. *Med. Chir. Transactions*. 1866. Vol. 49.

on its left, and the smaller one on its right side, was undoubtedly the bed for the two sets of stonelets.

Dr. J. Pramann, who had the kindness to make the sections of the stones, gives the weight of them as follows:

Smooth stones,	1 gr. 177	Rough stones,	6 gr. 29
" "	2 " 143	" "	6 " 10
" "	3 " 106	" "	8 " 6
" "	4 " 80	" "	9 " 5
" "	5 " 22		
	528		50

Together, gr. 578.

The section of the stones so far disappointed my expectations that the nuclei did not show anything characteristic which would lead one to suspect that they had immigrated from the intestines. The largest stone contained three nuclei, so that at one time three separate stones must have existed, which by ulterior earthy deposits coalesced in one. The next largest stone had its nucleus quite eccentric, and contained a large cavity. Compact and porous layers, in irregular alternations, characterized each stone. Of the rough stones, only the largest admitted of being cut in two. Its structure was exceedingly porous.

The material of all the stones was the same—phosphate of lime and a liberal admixture of carbonate of lime.

Progress of Medical Science.

Nitro-Muriatic Acid in Asthma.—Dr. B. F. Records reports a case (*Medical and Surgical Reporter*) which he considers to be Spasmodic Asthma cured by the internal and external administration of this acid. The dose was six drops in half a tumblerful of sweetened water every eight hours. Ten drops of the same in a gill of water were applied locally in the region of the liver by means of a saturated flannel cloth. He does not state how long it took to effect the surprising result.

Expectoration of a Minié Ball.—Dr. A. Geiger, Dayton, Ohio, publishes in a recent number of the *Medical and Surgical Reporter* the case of a soldier who was wounded in the chest on the 7th of April, 1864, which shows a rather remarkable circumstance in connexion with the subsequent appearance of the missile. The ball entered at the lower margin of the seventh rib, penetrating the chest, and lodged. He bled severely at the time, but refused to be carried to the hospital, and remained with his comrades in camp, and after five days started on horseback with Gen. Stoneman's brigade into Georgia, South Carolina, etc., and continued with his regiment until the close of the war. He states that after the healing of the wound externally, he did not experience much inconvenience, except occasional shortness of breath, and inability to perform active exercise, such as fast walking, running, etc. After being discharged from the army, he returned home, and engaged in work at his trade, that of a carpenter, and continued to enjoy tolerable good health until some time in September, 1866, he contracted by exposure a severe cold, since which time he has had some cough, and frequent expectoration of blood; also at times complete aphonia, with sense of suffocation. One of these attacks was so severe as to produce spasms and insensibility, which continued for several hours. Oftentimes, during a severe fit of coughing, accompanied sometimes by vomiting, he would feel the presence of a hard body in the windpipe, which he could almost at the time cough up.

On the 26th day of March, 1867, after having been at work during the forenoon, he felt so unwell at noon that he returned home, and in a short time afterwards was taken with a severe fit of coughing, and soon expectorated a "Minié ball," weighing three fourths of an ounce, and the one that nearly three years previous had entered the left side. The ball was covered entire with a tough mucous coat, and the small cavity at the base was filled with pus. Considerable hæmorrhage followed the expectoration of the ball, but the relief he experienced was so great, that he rejoiced to be rid of his unpleasant companion that for so long a time had been the occasion of so much discomfort.

Absinthe.—The French Senate lately received a petition that some steps should be taken by the Government to prevent the sale and consumption of absinthe. Baron Charles Dupin read a very interesting report on this petition. He pointed out that the mountains of the French Jura and the town of Besançon produced it in sufficient quantities to supply the whole of the French market. It produced insanity after a certain time; and the ravages produced by it in the French army were such that Marshal Forey had prohibited its sale at the military canteens throughout his command. Baron Dupin suggested the imposition of a heavy tax as the best way of checking its consumption, which, if it went on at its present rate, would have quite as pernicious an influence on the population of France as opium had on that of China. He recommended that the petition be referred to the Government for consideration, and this motion was agreed to without a division.

How to Syringe the Ear.—In order that a stream of water may reach thoroughly the bottom of the ear, it is necessary first that the way that leads to it be straightened as far as possible. For this purpose take hold of the auriculum, or external portion of the ear, and draw it pretty firmly directly upwards, and in this way the upper and lower wall are brought as nearly as possible into straight lines. Holding the ear in this position with the left hand, take the syringe in the right, and inject the water *gently*, yet with a *little* force, into the ear, directing the point, which should be introduced a little into the external orifice of the meatus, inwards, a little downwards, and forwards in the general direction of the tube. Of course a cup must be pressed against the face, beneath the tragus, in order to catch the water as it escapes. It is recommended to have two cups, one to contain the clean water to be injected, and the other to catch it. The best syringe for the ear that I have ever seen, is what is known as the Ear Syringe, made of gutta-percha, which is very light and very convenient, as well as durable. The syringing operation is to be continued till its object is attained, which is always *cleanliness*.

Better use simple warm water, without any soap, which is supposed to irritate considerably. It may be repeated as often as necessary for the attainment of the object in view. Some persons are not affected at all by syringing the ear, while others, who are in perfect health, and who are anything else but *nervous*, faint from it.—Dr. E. Williams, *Cin. Lancet and Observer*.

Detection of Blood-Stains.—M. Blondeau, of Nancy, has sent a memoir to the Academy of Sciences, relative to the detection of stains of blood upon linen in the case of legal surgery. All persons occupied in legal medicine comprehend the great interest attached to such inquiries; for after the linen has been washed the stains resemble very much stains of rust or iron-mould, or marks which certain organic acids or vegetable coloring matters would leave. These are the principal cha-

racters indicated by the author: 1. Stains of rust or iron-mould are clear and dull; blood-stains are of a deeper color, and shining. 2. If the linen be wetted with hydrochloric acid, the iron-mould is dissolved, while blood-stains remain unaltered. In the former, the presence of iron is at once indicated, but not so in the latter. 3. The stains of acid fruits with iron are hygrometric and soluble in water. 4. The microscope should be employed, in order to recognise directly the globules of blood detached from the linen and dissolved in oil.—*Brit. Med. Jour.*

Cod-Liver Oil.—M. Naumann has arrived at the following conclusions concerning the physical constituents and the physiological action of cod-liver oil: 1. Cod-liver oil travels through dry or moist animal membranes with much greater facility than do any of the other fatty oils. 2. Brown cod-liver oil possesses this property in the most marked degree. 3. The cod-liver oil which has been the most completely deprived of its biliary principles, almost entirely loses its power of penetration, and acts only in the same manner as the other kinds of oil. 4. Cod-liver so deprived of its biliary matter can regain its power of penetration by the addition of bile to it. 5. The other kinds of oil treated in the same matter with bile, acquire the power of more easily traversing the animal membranes than they previously possessed. The fat of cod-liver is more easy of absorption than any other fat.

An Anodyne Formula.—The following formula is recommended for combining chloroform and morphia for internal administration: One part, by weight, of morphia is dissolved in two parts of rectified wine-vinegar, and twenty parts of rectified spirit of wine; and the solution, when cold, is mixed with eighty parts of chloroform. One drop contains the three-hundredth part of a grain of morphia. The dose for a child is two to fifteen drops; for an adult, thirty to forty drops. It is said to give relief in most painful affections much more quickly and certainly than morphia alone, and to leave none of the unpleasant after-effects of opium. The subcutaneous injection of morphia during chloroform narcosis, is strongly advocated in all those cases where it is desirable to maintain the state of unconsciousness for a lengthened period.

Prejudices concerning Breast Milk.—M. Devergie and M. Boudet have been carrying on a discussion relative to ill-regulated nourishment of infants, which is of some practical interest. M. Devergie asserted that nine months' milk was too rich for a new-born infant. M. Boudet declares that chemical analysis demonstrates that, from the first to the eighteenth month, the milk scarcely changes at all. It follows that the supposed danger of feeding a new-born infant with the milk of a woman who has been nursing twelve months is chimerical. M. Boudet also combats the wide-spread opinion, that a new-born infant rejuvenates the nurse's milk.—*British Medical Jour.*

Blanching of the Hair.—Physiologists have been at a loss to account for the sudden whitening of the hair which is known to be produced by intense and sudden terror or profound grief. Mr. Erasmus Wilson, in a paper recently read at the Royal Society, threw considerable light upon the question. The paper was founded on a case apparently unique, in which every hair of the head was colored alternately brown and white from end to end. The white segments were about half the length of the brown, the two together measuring about one-third of a line. Mr. Wilson suggested the possibility of the brown portion representing the day growth of the hair, and the white portion the night growth, and this opinion was corroborated by the remarks of Dr. Sharpey and others of the Fellows who took part in the discussion which followed the reading. Under the microscope the colors of the hair were reversed—the brown became light and transparent, the white opaque and dark; and it was further obvious that the opacity of the white portion was due to a vast accumulation of air-globules packed closely together in the fibrous structure of the hair, as well as in the medulla. There was no absence of pigment, but the accumulation of air-globules veiled and obscured the normal color and structure. Mr. Wilson observed that, as the alteration in structure, which gave rise to the altered color, evidently arose in a very short period, probably less than a day, the occurrence of a similar change throughout the entire length of the shaft would explain those remarkable instances, of which so many are on record, of sudden blanching of the hair; and he ventured to suggest that during the prevalence of a violent nervous shock the normal fluids of the hair might be drawn inwards towards the body, in unison with the generally contracted and collapsed state of the surface, and that the vacuities left by this process of exhaustion might be suddenly filled with atmospheric air. Dr. Sharpey mentioned a recent example of sudden blanching of the hair, which had been observed by Dr. Landois, of Greifswalde, as reported in Virchow's Archiv, and which was ascertained to be due to accumulation of air-globules in the fibrous substance of the hair.—*Lancet.*

On the Examination of Diabetic Urine: New Reagent for Glucose.—After noticing the several reagents used, and pointing out their special inconveniences, MM. Francqui and Van de Vyvere propose a solution containing oxide of bismuth. The following process cannot, they say, give rise to any fallacy. Prepare the reagent by precipitating a solution of acid nitrate of bismuth by a great excess of caustic potash, and pour a solution, drop by drop, into the moderately heated solution, until the precipitated hydrate of bismuth is completely redissolved. To recognise a diabetic urine, heat a portion with the above solution. After a few minutes' ebullition, the urine becomes brown, and metallic bismuth is then precipitated in the form of a black powder of crystalline appearance, adherent to the glass if glucose be present. They have satisfied themselves that the principles contained in normal urine, such as urea and uric acid, do not precipitate the above reagent. Albumen only causes a brown color and a slight turbidity, which they consider to be due to the formation of sulphide of bismuth. Sulphuretted urines also give a black precipitate in a solution of oxide of bismuth in potash and tartaric acid; but this reaction cannot be confounded with that caused by glucose. It is, besides, easy to recognise and (if desired) to separate the albumen. Thus, on bringing to ebullition the urine of a person suffering from Bright's disease, the liquid becomes turbid, opalescent, and deposits coagulated albumen. Sulphides and sulphuretted hydrogen are easily recognised by means of hydrate of lead, which these compounds darken.—*Gazette Médicale* and *Chemical News.*

Pomade for Chilblains.—In an article on chilblains, by M. Guersant, that surgeon states that the following ointment is often very valuable: Lard, 30 parts; iodide of potassium, 1 part; tincture of iodine, 1 part.

Gonorrhœal Ophthalmia.—M. Gosselin strongly recommends frequent injections of highly alcoholized water under the lids in cases of gonorrhœal ophthalmia.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & Co. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—TEPHENS Y CA

New York, June 15, 1867.

THE EXAMINATION FOR ADMISSION TO OUR MEDICAL SCHOOLS.

THERE are many points connected with the action recently taken by the Convention of Medical Teachers which are deserving of notice; but not the least among these is that relating to the necessity of a preliminary education on the part of all applicants for matriculation. It is too well known that under the existing system of admitting students to our medical colleges, the only desire seems to be to have a large class, and swell the treasurer's account; every means is taken to attract young men to the study of medicine, without taking into account their fitness for the undertaking. The result of all this is, that the number of students is in the aggregate very large, and the amount of brains they represent very small. There have been no measures adopted heretofore to ascertain the fitness of any would-be student of medicine for his prospective tasks in a medical college, other than the ability to write his name legibly upon the matriculation book. By that act he becomes a matriculant of the college, becomes accountable for the fees of his tuition, and that is all that is required of him.

The wisdom of exacting some standard of qualification on the part of all applicants for medical studies has never been doubted, but the policy of acting upon such a belief by those whose interests were directly at stake, has been quite another thing. The faculties of our colleges have repeatedly, almost to a man, admitted the necessity of preliminary education; but at the same time they tell us that any compulsory measures in regard to it would be highly impracticable. They are well aware, in making such an assertion, that the cause of medical science will not suffer so much as the medical schools; they know full well that the number of those in the class who have graduated from literary institutions is comparatively very small, and that those who are otherwise well qualified to commence attendance upon lectures, is perhaps still smaller. Hence, if any reasonable demand were made upon the applicants, the class would dwindle down to a very insignificant number. This we must admit, in a pecuniary point of view, is an all-powerful reason for so much of the apathy which has instilled itself into all those measures contemplating reforms in medical education.

Another assigned reason for neglecting to call for satisfactory evidences of fitness for the commencement of the study of medicine, is the want of some agreed standard to measure such qualifications by the adoption of a rule that could be practical, and that could be enforced without crowding out many worthy and competent aspirants for service in our ranks. The unfairness of compelling every applicant to show a literary diploma, has been too obvious; but the question as to how much should actually be required, has long been an open one. The recent decision of the convention upon this point, now appeals to the common sense of every faculty. The standard is by no means too high, and is certainly low enough for a fair beginning. All reasonable objection to its general adoption would seem, at least upon the ground of feasibility, now to be done away with.

The next question, as to how the examinations for admission should be carried on, is another one of great importance. Here again, the stringency of even this simple examination is so apt to affect the interests of the college, in regard to the size of the class, that the teachers themselves would hardly be considered, on general principles, as very impartial examiners. Much better would it be for those who have no interests at stake, to undertake this task; in other words, let it be entrusted to those who are not connected in a professorial way with the college. Every institution can very readily select some of the many well educated young physicians who have a taste for literary and scientific pursuits, to undertake this labor for the very honor of being known as members of the examining board of the college. The work would be by no means arduous, as it would only relate to such of the candidates who were unable to show a diploma from a literary institution.

The proper manner of conducting these examinations, in giving a free entry to those who had regularly received a degree of bachelor of arts, would eventually tend to encourage previous graduation from literary institutions; and young men would by and by consider it as necessary and as important to undergo such a training before studying medicine, as they now do to study for the ministry. In order to encourage such a course, it might be expedient, at least for the time, to place a premium upon a literary diploma, by even shortening to its possessors the regular attendance upon lectures, making the term six months, or even a year less. This, considering the great disparity of intellectual culture between those who have and have not been favored with a literary education, would certainly be allowable.

Again, the adoption of a system of preparatory examination would have another good effect in raising medical colleges in the estimation of young men, and

coaxing many an ambitious one into the study of medicine, because the lists were not unworthily entered. Our literary colleges compel all applicants to undergo a preparatory test, and the consequence is, every fortunate one who is able to enter, feels proud of the distinction. The more rigid the preparatory examinations are, the more eager do the applicants seem to be for an admission. This fact must also have its due significance, when applied to our medical colleges, and may be taken in evidence against the assertion that the number of applicants may fall off when even a nominal examination stands in the way of their admission.

Now that we have agreed upon a standard of acquirements, it remains to be seen whether the various colleges throughout the country will see fit to adopt not only the recommendations of the Teachers' Convention, but of the American Medical Association, and if not, it will be interesting to hear their excuses for a failure to comply.

But when are these suggestions to be carried into effect? Obviously the sooner the better. All reasonable endeavor on the part of the committee should be made to bring about the concerted action of the colleges, and we see no good reason why each college cannot prepare itself to announce, by the coming fall, that preliminary examinations would be enforced upon all new applicants for attendance upon lectures.

"Mr. Stephen Buckland, in the current number of *Fraser*, gives a startling account of the nature of the supply of milk to the inhabitants of New York." * * * * After the details of the swill-milk distilleries are given, with which our readers are quite familiar, the editor of the *Medical Times and Gazette* proceeds:

"It is from such dairies that New York is *exclusively* supplied with milk; for, although public opinion is occasionally excited against them, they have, in fact, secured the monopoly of the entire supply."

We hardly know whether to pity or blame the ignorance of our British medical brethren as to how we get on in New York. This article is, in point of reliability of statement, about on a par with the recent burlesque, entitled "An Englishman's Visit to America during the War," in which the traveller supposes New York to be in a state of rebellion, on seeing the hack-drivers who meet him on landing, and gets ready to shoot buffaloes and Indians on reaching the Park, etc., etc. Be it known to our friends of the *London Medical Times and Gazette*, that although distillery milk is probably used in New York, by far the greater portion of our people, who are American enough to prefer milk to whiskey and Alsop's bitter ale, drink milk from cows which feed in Orange and Westchester County pasturages, which are miles away from distilleries.

That it is diluted, we cannot deny, but with water. We also admit the existence and use of distillery milk; but we must protest against such wholesale statements as those which we have quoted, from our usually intelligent and truth-speaking neighbors.

Reviews.

Transactions of the American Ophthalmological Society.—Third Annual Meeting. Boston, June, 1866.

This Society, whose proceedings were reported in our columns, has published the papers read at the last annual meeting, in a handsome pamphlet of 46 pages. The papers are generally interesting and instructive. In consideration of the verboseness of transactions of medical societies in general, we are hardly disposed to criticise this modest book on that score; yet, even here, in one or two instances, pruning would benefit the papers. They are on—1. Sudden Monocular Amaurosis, by *Dr. Sands*, a most carefully observed and well written case. 2. On the same subject, by *Dr. Allin;* the want of an immediate ophthalmoscopic examination deprives the case of the interest of the former one, leaving more for conjecture. The former was supposed to be due to hæmorrhage within the sheath of the optic nerve, and the loss of vision was permanent. In the latter the loss of vision was attributed to hæmorrhage producing pressure outside of the sheath, and sight was restored to a degree which ophthalmologists express by the fraction $\frac{20}{200}$, i. e. the patient could read letters at 20 feet which should be read at 30 feet. 3. *Dr. Dyer* reports a fracture of the lens of one eye, and of the anterior capsules of both eyes, from death by violent hanging (Probst's case). 4. *Dr. Hildreth*, a paper on Anæsthesia of the Cornea, without intra-ocular tension. 5. *Dr. Hay* on the refraction of a small oblique pencil of diverging rays by a glass plate with plane parallel surfaces. 6. *Dr. Derby* on the necessity of employing greater accuracy in ascertaining and expressing the degree of acuteness of vision. The author recommends the use of a steady flame, uniform in intensity of illuminating power, always at the same distance from the letters, and placed in a room from which daylight is excluded. With almost Teutonic minuteness, two and a half pages are given to the recommendation and explanation of this method. 7. *Dr. Agnew*, a method of operating for divergent squint. 8. *Dr. Noyes*, Amblyopia produced by osmic acid, i. e. by its fumes The eye returned to its normal condition after one day. 9. *Dr. Noyes*, 3 cases of sub-retinal effusions, puncture; two were improved. 10. *Dr. Jeffries*, on the Anatomy and Physiology of the Ciliary Muscle in Man. He shows that the circular fibres of Müller of the ciliary muscle in contracting only assist the meridional ones, and remarks that he follows others in supposing that the method of action of the muscle is by contracting on its origin and slackening up the suspensory ligament, allowing the lens to beeome more convex, thereby accommodating the refractive media of the eye to the divergent rays of light from near objects, and focussing them on the retina. Dr. Jeffries also quotes from *Meyer*, of Bremen, and *Henle*, to show that the ciliary muscle differs so much in animals from that in man as to be useless in attempting to adduce from them the mechanism of accommodation in man; a belief which the author had previously enunciated. 11. *Dr. Williams* (Boston), Suture of the Flap after Extraction of Cataract, which has already been fully described in the Record.

Altogether this is a work creditable to the new and vigorous Society.

Watson Abridged; A Synopsis of the Lectures on the Principles and Practice of Physic. Delivered at King's College, London, by Thomas Watson, M.D., Fellow of the Royal College of Physicians, etc. (Abridged from the last English Edition.) With a Concise but Complete Account of the Properties, Uses, Preparations, Doses, etc. Taken

from the U.S. Dispensatory of all the Medicines mentioned in these Lectures, and with other valuable additions by J. J. MEYLOR, A.M., M.D. Philadelphia: Published by the Author. 1867. Pp. 277.

THE volume on our table is really a very valuable help in an emergency: it is a faithful abridgment, and as such we commend it to the profession. Still, Dr. Watson, who has come to be regarded as the Goldsmith or the "gentle Elia" of medical literature, has been made to exchange many a grace of manner for the conciseness of Tacitus. This we somewhat regret, but deem unavoidable in a practical age. The work will be frequently referred to by its possessor, and with profit.

RESEARCHES UPON "SPURIOUS VACCINATION;" or, the Abnormal Phenomena accompanying and following Vaccination in the Confederate Army during the recent American Civil War, 1861–1865. By JOSEPH JONES, M.D., Professor of Physiology and Pathology in the Medical Department of the University of Nashville, Tenn. 8vo., pp. 132.

THIS monograph is perhaps the most exhaustive one that has been written in any language upon the subject, and is a credit not only to the author, but to American medicine. The treatment of the different questions connected with the influence of poor diet, skin diseases, and syphilis, in affecting the integrity of the virus, is both able and conclusive. No pains have been spared by our author to collect all the material which could have any bearing upon the points at issue; and the number of facts from which he makes his deductions are, to say the least, immense. We commend the pamphlet to the careful perusal of every general practitioner, with the assurance that they will be satisfied that our author has most skilfully and effectually performed a very onerous task.

INHALATIONS IN THE TREATMENT OF DISEASES OF THE RESPIRATORY PASSAGES, particularly as effected by the use of Atomized Fluids. By J. M. Da Costa, M.D., Physician to the Pennsylvania Hospital, Fellow of the College of Physicians, etc., etc., etc. Philada. J. B. Lippincott & Co., 1867. pp. 86.

THIS excellent monograph, got up by the publishers in superb style, well supplies a want felt by the profession. The merits and objections of the various instruments employed for the application of nebulized fluids are commented upon, and the literature of the subject presented in an agreeable manner. The conclusions of the author given in a previous number, renders an extended review unnecessary. The illustrations are excellent, and the work itself should be in the hands of every practitioner desirous of keeping up with the therapeutics of his profession.

ON THE ACTION OF MEDICINES IN THE SYSTEM. By FREDERICK WILLIAM HEADLAND, M.D., B.A., F.L.S., Fellow of the Royal College of Physicians, etc. Fifth American from the fourth London edition. Revised and enlarged. Philadelphia: Lindsay & Blakiston. 1867. 8vo., pp. 428.

WHEN a work has reached its fifth American and fourth London edition, it hardly stands in need of any special commendation. The reputation of the author is so well established as a philosophical thinker, an ardent worker, and a reliable, conscientious, and practical teacher, that his work will always find a place upon the table of the studious practitioner, and the principles which are therein laid down be accepted and respected by every one who wishes for the advancement of the much neglected science of Therapeutics. We cannot resist the temptation of commending this valuable work to the serious study of that class, particularly whose ideas of the treatment of disease are narrowed down to tonics and stimulants.

PRACTICAL DISSECTIONS. By RICHARD M. HODGES, M.D., formerly Demonstrator of Anatomy in the Medical Department of Harvard University. Second Edition, thoroughly revised. Philadelphia: H. C. Lea. 1867. 12mo. pp. 271.

THE work before us fulfils its intention of being a practical guide-book for the student of anatomy in the ordinary prosecution of his studies in the dissecting-room. The author gives evidence upon every page of his fitness for the task, and shows that appreciation of the actual wants of the young dissector which nothing save that of demonstrator could have given him. The divisions of the work are most admirable, and the plan of describing the several parts which are conjointly exposed in a given dissection, is of obvious utility; while the restriction of the demonstrations to such appearances as are only to be expected after an ordinary dissection forms a very interesting feature of the work, and will tend not a little to give that encouragement to a beginner which he so much needs. It is very concisely written, and is of a very convenient size.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, APRIL 17, 1867.

DR. ALFRED C. POST, President, in the Chair.

A MECHANICAL APPLIANCE FOR CLEFT PALATE.

DR. KINGSLEY, of the College of Dentistry, by courtesy of the Academy, exhibited a patient to whom was adapted an appliance for cleft palate. He stated, that, according to his experience, the size of fissure bore no relation whatever to the distinctness of articulation. He said that the patient before the Academy had the largest fissure uncomplicated by hare-lip he had seen.

MEDICAL EVIDENCE.

DR. ORDRONAUX read a practical paper upon the subject above designated, in which he passed in review the various difficulties besetting the medical man upon the witness-stand. He said that most suits for malpractice had their origin in "envy, hatred, and all uncharitableness," and that medical witnesses often were unsuccessful from a deficient linguistic power and a want of self-reliance. To say nothing of a full and abundant knowledge of the subject, others failed to render themselves intelligible to a jury, owing to a too liberal use of technical terms. Again, lawyers are apt to insist on reasons when none can be given; Dr. Winslow, of London, who was perhaps oftener summoned to court than any expert in England, was not unfrequently put in this position.

Lawyers also exhibit a want of precision and candor in putting questions—neither counsel nor witness understand each other—so that the testimony does not become what was intended, an unbroken chain of cumulative evidence. But on the other hand, experts should bear in mind that they are not partisans, but that, as their duty is to throw light, they are advisers and counsellors of the court itself. Being thus unprejudiced, their opinions can never be unilateral in character.

Witnesses in these cases do not testify on matters of knowledge, but of belief, as grounded upon the generalization of facts. As to conflicts among experts regarding special methods of therapeutics, the court can make no distinction, but admits witnesses as experts in their own calling, and leaves the decision regarding credibility to the jury. The court thus takes refuge under its neutrality.

Experts are not allowed to state their views in matters affecting character, or their opinions regarding conduct; to illustrate, the court has stopped a witness who averred that a brother practitioner had acted dishonorably, such a course being deemed extra-professional.

It is not necessary that the "*skilled witness*" should be engaged constantly in practice, the presumption being, that, after having duly collated authorities, he represents the leading opinion. He cannot read from books in court, because the opinion sought is his own; besides, professional books deal only in universal propositions, while every case has a complexion of its own.

Notes may be used to refresh the memory touching facts, and it is not essential that the script be in his own hand, or made on the instant; if he speaks of them *knowingly*, his testimony loses nothing in value.

The doctor dwelt somewhat upon the confessions of patients, holding that the only exception to their being privileged communications, exempt from repetition in court, was in cases where facts, detrimental to public policy, might be concealed. As precedent, he cited a case where the physician was compelled to give evidence that a prescription was sought from him for the criminal purpose of abortion.

Around cases of insanity there clustered many difficulties—other experts are pitted against him, and when called upon to prove that a party is or is not insane, he cannot be expected to offer what is satisfactory to all. Some questions being incapable of explanation cannot be answered categorically, *i.e.* by *yes* or *no*.

Experts should carefully avoid the common error of forming an opinion upon isolated facts, and should not lose sight of the element of contingency. Above all he should not be entrapped into branching off from his subject, but always keep this fact prominently before him, that fallacies are feints to make an antagonist uncover. Such questions as "*Are or are not wounds of the head mortal?*" "*Is the mind a unit or composite in its organization?*" do not admit of a categorical answer. Upon the subject of insanity diverse opinions will always prevail, according as the cause may be regarded as psychological or somatic.

Experts may differ about the degree, but not about the fact. Nor can an opinion be based upon the degree of excitability.

Dr. Anderson then read the bill pending before the Legislature, which provides for the suppression of the circulation of publications, circulars, etc., suggesting means to produce criminal abortions. The penalty attached is one year's imprisonment in the county jail, and a fine of $1000.

The Academy then adjourned.

Stated Meeting, May 1, 1867.

Dr. Alfred C. Post, President, in the Chair.

A NEW METHOD OF RESUSCITATION FROM HYPERANÆSTHESIA BY CHLOROFORM.

Dr. Worster related a case in which chloroform had been administered to a patient, by a party whom he regarded as competent, as a preparatory step to an operation, by himself, for the relief of hæmorrhoids. Suddenly the patient had stertorous breathing, became pulseless, and exhibited all the symptoms of a speedy dissolution, but by the simple expedient of reversing his position, and inclining his body to an angle of forty-five degrees, he was fully restored.

Dr. Chamberlain said that his experience coincided with observations of other practitioners, that in all operations about the anus, it was exceedingly difficult to bring patients under the influence of an anæsthetic.

Dr. Richards suggested ether spray as a safeguard against accident in all operations of this kind.

EVERSION OF THE LID IN AFFECTIONS OF THE EYE IS ALWAYS IMPORTANT.

Dr. Garrish gave the details of a case in which a young girl, after having been treated at her home in the country for what was termed "a cold in the eye," came to him with lids so tumefied that it was almost impossible to get at the true condition of the globe, which was then just on the point of evacuating its contents. Soon after this, along with the other discharges, appeared a small folded piece of paper, which, in imitation of her fellow pupils, the little patient had inserted beneath the upper eyelid. He cited the case merely to show the importance of always everting the lid in all affections of the eye; it was a point not to be too strongly insisted upon.

A CASE OF REDUCED SUBGLENOID DISLOCATION OF THE HUMERUS.

Dr. Post gave the particulars of a case of subglenoid dislocation of the *os-brachii*, where etherization, combined with Dr. Nathan R. Smith's method of counter-extension from the opposite wrist, had failed, but by applying the heel to the axilla in the usual way, reduction had been effected with comparative ease. His success, and this he had before observed, was to be attributed to the fatigue of the muscles, induced by the previous manipulation.

PREGNANCY IN A DOUBLE UTERUS DETECTED DURING LIFE.

Dr. Peaslee recited the case of a lady who had travelled some 400 miles for an opinion regarding the nature of a tumor. She was the mother of five children, and insisted that she felt the motions of a fœtus, but the tumor, which was sensitive on pressure, and had a peculiar nodular feeling, was confined entirely to the right of the umbilicus. After a careful examination, the question arose in his mind, whether or not it was a case of extra-uterine pregnancy, since the head was well up in the iliac region and to the right side of the vagina. But having detected that the tumor was separated from his finger only by a *membrane*, and having discovered higher up the edge of a thin septum, he concluded that the right half of the uterus had received the ovum, and that the left half had not been impregnated; or, in other words, that the patient had a double uterus. It was not long before the husband summoned him to the bedside of the patient, with the announcement that the patient appeared to be in labor, which proved to be the fact. The fœtus was six months old. He thought that this condition of things was rarely detected during life.

TWO CASES OF VOCAL POLYPI ASSOCIATED WITH POLYPI OF TONSIL OF CORRESPONDING SIDE.

Dr. Richards gave two instances where a polypus, situate upon one of the vocal chords, was associated with a fibrous polypus of the right tonsil. This was not frequently suspected during life, and he mentioned it to show that there might be some inexplicable connexion between the two conditions.

The Academy then adjourned.

Ready Made Authors and Doctors.—There is a "Literary Bureau and Agency" in London, at which, according to a communication received by a respectable surgeon from its conductor, "original well written medical MSS., and a medical diploma, M. D., New York," can be obtained for a reasonable sum. What a profitable business such a bureau would do on our side of the water!

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, MARCH 13, 1867.

DR. H. B. SANDS, President, in the Chair.

DR. POST exhibited specimens of ossification of the upper part of the aorta and radial arteries, removed from a dissecting-room subject, aged about sixty years.

He also presented some calcareous concretions taken from the meibomian glands of a patient who called to his office complaining of some foreign substance in the eye. An examination of the lid disclosed the presence of some small calculi, which were easily turned out with the point of a pin.

HYPERTROPHY OF SPLEEN.

DR. ALLIN exhibited an enlarged spleen, weighing seven pounds and eleven ounces, which he removed from the body of a man who died of apoplexy, after having suffered from dyspepsia for the last seventeen or eighteen months, and from occasional attacks of dyspnœa for four months. The tumor was recognised several months before death, and was supposed to be due to malignant disease. The gross appearances of the organ were perfectly normal; no microscopic examination of the tissue had been made.

DR. ROGERS alluded to the case of the late Dr. Tuttle, whose spleen weighed about seven pounds.

DR. FINNELL, on behalf of Dr. W. Beach, Jr., presented a specimen of extra-uterine pregnancy. It was removed from the body of a German woman thirty-seven years of age. She menstruated regularly up to two or three months ago; three weeks ago a bloody discharge commenced, which continued for two weeks, at the end of which time, on Monday last, she was taken with violent cramps, which, although they relaxed a little during the following morning, finally terminated in her death on Tuesday evening. In conclusion, he remarked that the case would have been a proper one for the trial of the plan of arresting the attendant hæmorrhage proposed by Dr. Rogers.

On motion of DR. FLINT, a committee consisting of Drs. Draper, Smith, and Allin, was appointed to make a microscopical examination of the spleen presented by the latter gentleman, and report at the next meeting.

AMPUTATION OF ANKLE-JOINT, ETC.

DR. SANDS lastly presented a specimen of amputation at the ankle-joint accompanied with the following history:

While visiting the wards of the New York Hospital a few days ago, my attention was called by the house surgeon to a young man, æt. 21, who had requested that I should amputate his leg, on account of a disease of his right ankle which had troubled him more or less since childhood, and which had, for some months past, disabled him from going about. On examination I found the ankle somewhat swollen, with several fistulæ on its inner aspect leading down to carious bone. The ankle-joint appeared to be firmly anchylosed. From the length of time the disease had lasted, and from the depth and extent of denuded bone detected by the probe, I determined to put the patient under ether, and endeavor to amputate at the ankle-joint by breaking up the existing adhesions. Having made the usual incision, I succeeded, by employing considerable force, in separating the foot, together with a thin shell of bone from the articular surface of the tibia. The saw was then applied to remove the malleoli, and the wound brought together in the ordinary manner. Subsequent examination of the amputated foot showed: 1st, bony anchylosis at the ankle-joint; this, where it existed, was very firm, as evinced by the fracture which took place just above the level of the articulation, at the time of the operation. It did not extend, however, to the surfaces between the astragalus and malleoli, these being covered with the soft, gelatinous substance so commonly seen in disorganized joints. 2d, bony anchylosis between the astragalus and os calcis, complete, and involving both the posterior and anterior calcaneo-astragaloid articulations. A fact which seemed difficult to explain was the strict limitation of the morbid process to the parts just mentioned. As the members were aware, there were two pairs of articular surfaces between the astragalus and calcaneum. The posterior of these was provided with a separate synovial sac, while that of the anterior was continuous with the articulation between the astragalus and scaphoid. In the specimen it would be noticed, that the disease was strictly confined to the surfaces between the astragalus and calcaneum; the head of the astragalus, and the corresponding surface of the scaphoid bone being normal, and covered with healthy articular cartilage. Dr. Sands thought that the facts might be most easily explained by assuming the existence, in the case now related, of a distinct synovial sac for the articulation between the astragalus and scaphoid.

STATED MEETING, MARCH 27, 1867.

DR. H. B. SANDS, President, in the Chair.

SUB-PLEURAL EXTRAVASATION.

DR. FINNELL exhibited several specimens, the first of which were the lungs removed from a child three months old. The patient seemed well, when it was suddenly seized with a crying spell lasting for several hours, which was evidently due to internal pain, after which this dyspnœa appeared, and the child died after several hours, from suffocation.

The post-mortem examination gave no internal lesion to account for the pain, beyond the condition of the lungs, which showed extensive extravasations of blood underneath the pleura. There were no evidences of pulmonary apoplexy.

RUPTURE OF LEFT VENTRICLE.

The second specimen consisted of the heart and kidneys taken from the body of a man fifty-five years of age, who had been in ill health for two or three months preceding his death, during the most of which time he was obliged to keep his room. His principal complaint was severe pain and distress in the precordial region. His physician recognised some form of heart-disease, and advised him accordingly. He went out one evening with his daughter, and while passing through the street met some obstacle on the sidewalk which required a little exertion on his part to prevent a fall; soon after he expired.

The post-mortem disclosed rupture of the left ventricle, about its middle. The walls of the organ were as thick as normal, but were subject to extensive fatty degeneration. Both kidneys were found in the same condition.

FATTY PLACENTA.

The third specimen was a fatty placenta. The female from whom it was discharged had given birth to five living children, and was to all appearance in perfect health. The last labor was a perfectly natural one, but the child lived only three hours after birth. The placenta had very much the appearance as if it were sprinkled over with a handful of coarse salt, and at certain points the sensation communicated to the finger was similar to that which would be produced by calcareous degenerations.

ANEURISM OF AORTA.

The fourth specimen consisted of a heart in which an aneurism had burst just above the aortic valves, filling the pericardium with blood. The precise point of rupture into the sac could not, in the hasty examination made, be determined. The rent in the internal coat appeared as if made by a knife, and then the blood dissected its way for a considerable extent underneath the cellular coat.

The fifth specimen was removed from a man fifty-five years of age. He had been in ill health for two months before his death, with heart symptoms. The day previous he had complained more than usual of pains around the precordial region, accompanied with great distress. He gradually sank afterwards, and died. On post-mortem examination the pericardium was filled with clotted blood, and on looking down into the left ventricle, through the aorta, all traces of the semilunar valves had seemingly disappeared. Taken from the same subject was the lower end of the sternum with the eighth rib attached, showing a fracture of the latter bone, and which had become united by an overriding of the fragments.

Dr. Krackowizer discovered the aortic valves which were, on casual inspection, supposed to be absent, and found that they were nearly sufficient.

Dr. Markoe thought that blood in this case did not empty directly into the pericardium, but that it found its way there gradually. If it had escaped suddenly into the sac death would have been instantaneous, as the blood surrounding the heart would have prevented a dilatation of that organ.

THE EFFECTS OF ABORTION.

Dr. Finnell lastly exhibited a sixth specimen, consisting of the uterus and appendages of a victim of abortion. The woman was twenty-eight years of age, and died on Saturday, March 24. On the 22d of February last, finding herself between three and four months pregnant, she determined to have an abortion produced. She accordingly applied to an abortionist on Third Avenue for that purpose, and was operated upon by him about the 20th of March. No effect following, she had the operation repeated, but nothing came of it, and she applied to him a third time. A day or two after her last visit to the abortionist, symptoms of abortion showed themselves, and the fœtus was soon after expelled. From that time, until her death on the 24th, she suffered from symptoms which were of a pelvic character.

The autopsy was made with the assistance of Dr. W. Beach. On laying open the abdominal cavity there were no evidences of effusion in the peritoneum, but a large abscess was discovered in the right iliac region in the neighborhood of the broad ligament of the uterus. This abscess pressed upon the right iliac vein, which accounted for an œdema of the lower leg. On tracing the veins in the neighborhood of the abscess, they were found full of coagula, but no pus was discovered in them. The uterus was soft, larger than natural; the os was intensely congested, but there were no signs of recent abrasions. On the left side of the organ, in the neighborhood of the internal os, were two or three darkened spots resembling sloughy tissue, probably the results of previous attempts at abortion. They had evidently no direct connexion with the last illness of the patient. The site of the placenta was at the left and upper portion of the fundus, as shown by the characteristic roughened surface. In the right ovary two corpora lutea were found. The opinion given of the cause of death was intra-uterine phlebitis.

Dr. Garrish asked if there ever had been presented before to the Society a case of abortion, followed by death, in which no evidences of peritonitis existed.

Dr. Finnell was under the impression that several cases of the sort had been reported, and Dr. Krackowizer called to mind one in particular, presented by Dr. Voss.

ULCERATIVE DISEASE OF LARYNX, ETC.

Dr. Rogers presented the trachea and annexa removed from the body of a lady thirty-three years of age. He then gave the following history of the case:

She is said to have contracted a syphilis, some five or six years ago, which became constitutional, and among other manifestations presented that of ulcerative disease of the larynx, glottis, and epiglottis. About two years ago she began to fail in voice, which was gradually reduced in a short time to a mere whisper. About a year ago dyspnœa became quite urgent, she being subject to paroxysms of greater or less severity at different times. About that time, as I understand, Dr. Simrock saw the case, and made a laryngoscopic examination; his diagnosis was ulcerative disease of the larynx, involving the glottis, adhesion of the epiglottis to the upper rim of the larynx, and a perforation of the epiglottis, through which all the air that was inhaled entered the trachea. Not many months after this Dr. Parker was called to the patient, and during a fit of dyspnœa, from which she was then suffering, introduced a tracheal tube, which the patient wore until death. Total loss of voice soon followed, and within two months complete occlusion of the air-passage above the tracheal tube. She was seen on one or two occasions, subsequently, by Dr. Simrock, who still adhered to the diagnosis previously made, and concluded further, that in addition, there was an occlusion more or less complete of the left bronchus. She, in the meantime, suffered from bronchial symptoms, of more or less severity, and for different periods. Yesterday she suffered one of the ordinary paroxysms, and her physician, Dr. Lafayette Ranney, was called to her. He did not look upon the occurrence as anything unusual, and soon left the patient. In two hours after she expired, unaccountably.

The post-mortem examination was made at the request of a brother of the deceased. It is found, first, that a great part of the epiglottis has been destroyed by disease, that the remnant is adherent to the upper rim of the larynx, as Dr. Simrock had diagnosticated, but that the opening seen by the laryngoscope was a common one into the posterior part of the larynx, and into the œsophagus, resulting from adhesions of the apex of the pharynx to the fragment of the epiglottis. During the healing process this common opening had so narrowed down, that when dilated to the utmost, it did not seem to be more than three-eighths of an inch in diameter, and yet it is said that the patient ate solid food like any one else. Passing the probe down through this opening, it is seen to emerge into the œsophagus. Immediately after leaving the epiglottis you may observe the point of the probe fall into a cavity, which, looking at it from behind, gives you an appearance of an ordinary glottis, but further down you find that it is a cul-de-sac, the larynx being occluded at its lower border, and dissecting from below you come in contact with that occlusion, which is cartilaginous in character, at the lower rim of the thyroid cartilage. By passing a probe through the opening, which I have made at the upper edge of the larynx, it is seen to pass out just above this material which occludes the passage. The tube has been worn for a period of nearly nine months.

Following the trachea down, we have evidences of very extensive ulceration. In confirmation of the

diagnosis made in regard to occlusion of the left bronchus, a dark-looking substance will be seen in the trachea, just near the bifurcation. The cause of death was found to be occlusion of the tube with a large mass of very tenacious mucus.

Dr. Krackowizer remarked, that the occlusion of the left bronchus was due to a perforating ulcer of the trachea near the bifurcation, which admitted the protrusion of one of the lymphatic glands, situated normally upon the outside of the tube.

(To be continued.)

Correspondence.

MEDICAL MATTERS IN PHILADELPHIA.

To the Editor of the Medical Record.

Sir—Items of general interest among the profession in this city are scarce at present. The latest movement has been the formation of the Philadelphia Union Medical Association, an organization started by some of the general practitioners in the northern section of the city, for the object of promoting professional improvement among themselves, a better acquaintance with each other, and of protecting their pecuniary interests. Some fifty gentlemen joined the organization, appointed a committee to qualify each other, and the rest joining, as original members, and adopted a Constitution and By-laws, and the fee-bill of the College of Physicians.

Medical organizations are not as numerous, nor as attractive in this city as in New York; why, it would be hard to tell. Some of the societies have a great many members, who rarely think of attending their meetings, whether for discussion or business, and many such inattentive members occupy prominent positions, and could add much to the literary interests of the organizations they neglect. Then there are a great number of practitioners of good repute and extensive practice, who are not members of any medical organization at all. Those few who take an active interest in medical societies are gradually endeavoring to imbue the profession with the idea that it should be considered a necessary evidence of good professional standing to be connected with at least one society of the kind; and an effort will be made, if possible, to induce every practitioner to join the County Medical Society, so as to make it the chief representative body, in connexion with the scheme of State Societies and the American Medical Association.

There is very much needed in the city a sort of a Journal Association, somewhat similar to that in New York; and an ineffectual effort was made some years ago to create a library of current medical literature in connexion with the County Medical Society. There are several book-clubs, private organizations, consisting of from twelve to thirty gentlemen, who club in this manner to subscribe to certain journals, or to purchase certain monographs, which they receive in a certain succession. But in this manner a journal is sometimes several months old before it has gone the rounds, and the object should be for all to have early access to it. This can be accomplished only by the establishment of a reading-room where the journals shall be kept open to the inspection of members, but from which they should not be taken until the lapse of a certain period after their date of publication. It is part of the design of the new medical organization to establish a reading-room of this kind, with which view efforts will be made to secure a list of members sufficiently large to meet the necessary expense.

The summer sessions at the College are in full operation, and attended better, if anything, than last year. The practical course at the Jefferson Medical College is a complete success, and many of the students are gaining more actual insight into the details of their profession than they did in the winter, when so many and so varied a variety of subjects were presented en masse to their crude understandings; and they will be able to enter upon their ensuing winter course with such preparation as will enable them to appreciate it.

The action of the Convention of Medical Teachers recently held in Cincinnati, appears to give general satisfaction to the profession, and to most of such as are engaged in assisting students with their studies; that is, the class of gentlemen engaged in private tutorship and quizzing; but the concurrence of the colleges, as a body, is considered extremely doubtful; and indeed it is much to be doubted whether any innovation at all will be permitted to interfere with the present incomplete method which, much as it might have been all-efficient even thirty years ago, is markedly inefficient at the present day, though many good doctors are turned out in spite of the system. The probabilities are, that unless coerced by the simultaneous action of other colleges in adopting a gradation in tuition the present system of instruction will continue in Philadelphia for some years to come, outside influence to the contrary notwithsianding.

Dr. R. J. Levis, in connexion with his course on ophthalmic and aural surgery, at Jefferson Medical College, has established an ophthalmic clinic which has been very instructive. There presented himself recently, at this clinic, a German, N. H., æt. thirty, with an enormous elephantiasis, or hypertrophy of integument of the left side of forehead, including the brow and upper eyelid, with lobed fibro-cellular outgrowths. The color of the skin is normal, but the weight of the tumor has dragged the upper eyelid down over the lower one and beyond it, clear down to the ala of the nose, by the side of which it lies, everted.

This patient was delivered with the forceps, and at birth was noticed to have upon his forehead a small lump the size of a pea, which continued to grow, until at the age of fourteen the eye became obscured; since which time it has grown very slowly. On forcibly elevating the eyelid, the eye was observed to be cataractous, with no perception of light. The patient suffers from photophobia with the other eye, and his intellect is somewhat obtuse.

Prof. Gross recently showed his class Maggie T——, æt. fifteen, from whom, at nine years of age, he removed the left lower limb at the hip-joint, on account of deformity and incurable disease, the result of a very bad scald. The patient at the time was very much prostrated; recovery was apparently hopeless, and at the consultation, two distinguished surgeons of this city expressed themselves averse to the operation, which was, however, performed, as affording the only chance of relief; and to the surprise of all concerned, the patient got well without a single untoward symptom, though she was so much emaciated at the time that compression of the aorta was easily effected through the abdominal parietes.

The annual meeting of the Medical Society of the State of Pennsylvania will take place within a fortnight, and considerable interest is felt as to what will be the action with regard to the status of female physicians, or "women doctors," as they are now being called, in consequence of the recent change of name of the Female Medical College of this city, to that of Women's Medical College, in order, it has been maliciously said, to leave no doubt as to the order in the animal scale of

those to be educated there, inasmuch as the word female was not sufficiently distinctive.

Yours truly,

C. J.

Philadelphia, June 1, 1867.

A REVIEW OF A REVIEWER.

LETTER FROM DR. H. G. DAVIS.

To the Editor of the Medical Record.

Sir—It is with reluctance that I ask a place in your columns to correct some mistakes that were published in another journal, the editors of which are unwilling to admit corrections. The statements I make are not limited in their influence to myself, for I trust that, as a profession, we entertain a feeling of national pride, and a desire, not only to do all within our power for its advancement, but to maintain our claims for whatever we may accomplish before the world.

The March number of the *New York Medical Journal* contains an extended review of my work, entitled "Conservative Surgery." The reviewer, in some instances, unfortunately has mistaken words for ideas, quoting from other authors words similar to those employed by me in Conservative Surgery, and representing said language as expressing my ideas, or as defining the processes mentioned in my work, when, in fact, they are entirely dissimilar, not possessing the least *resemblance*.

The reviewer says: "In the first chapter (on fractures) Dr. Davis writes: 'This principle of treating fractures by simple, continued, elastic extension, was urged by us upon the profession in the early part of the year 1856, etc.'" He then inquires: "What, may be asked, was the principle generally recognised by the profession who have used the straight splints of Dessault and Boyer, and their several modifications, with extension and counter-extension?" This inquiry can be the best answered by describing the mechanical appliances used by these gentlemen for effecting extension and counter-extension. In these splints the *extending force is applied through a screw*, or its equivalent; this screw is turned until the parts are as tense as the surgeon desires. This, be it remembered, is done while the muscles are contracted, and it fails to weary and tire them by continuing to act, but remains unchanged, without pulling or extending beyond the point where the limb was when the surgeon ceased turning the screw, and thus it must remain, for all that the fixtures themselves can do to change it. There is, then, absolutely no extension when the surgeon ceases turning the screw. Theoretically, the limb simply remains fixed at the length it was left by the surgeon, but in fact, it is constantly losing, as the appliances always will yield, more or less. Now, if the screw is not turned, there will necessarily result a loss of the distance first gained, or of an amount of extension equal to the first amount. It requires no argument to prove that the screw or its equivalent *cannot* of itself effect a continuous pulling or extension; it is *only* while the screw is being turned that extension is made; consequently, while the screw remains unchanged, the limb is simply fixed, as though it were nailed to the splint. The result is not changed when the screw gives place to an equivalent in the form of a twisted rope, as used by Dr. Neil, of Philadelphia. This surgeon did not aim to keep up a continuous pulling; he substituted the rope as a cheaper and more simple equivalent for the screw.

Although Prof. Nathan Smith, M.D., of New Haven, Conn., employed the cord, pulley, and weight, yet his dependence in treating a fracture was upon the inclined plane. Prof. Smith says: "In most instances in which the limb has been thus dressed (on an inclined plane), almost every source of irritation being avoided, and the attitude natural and easy to the muscles, *I have not found it necessary to use permanent extension.*"

We were not cognizant of this use of the cord and pulley by Dr. Smith until recently; had we been, it would not have detracted from our claim for having been the first to recommend "*simple, continued, elastic extension*" as the *only means necessary for the treatment of fracture in general*—extension, be it understood, *without even co-aptating splints.* The extension we use differs from the screw and its equivalents, in that it constantly acts; it never ceases pulling. It is this ceaseless, unremitting extension that wearies the contracting muscles, overcoming their resistance, and thereby permits the fractured bones to come into their natural position.

If the reviewer cannot appreciate the difference between extension (as it is termed) by the screw and its equivalents, and continued elastic extension, as here explained, we must ask him to perform both kinds by his own hands. On one he will pull or make extension only until his extension can be secured and fixed by this screw; in the latter, there being no screw to secure the extension already made, he must remain at his post, pulling or extending unremittingly.

The reviewer becomes quite facetious over a new mode, recommended by us, for overcoming muscular contraction in fractures for the patella; and some of the processes, where application for this purpose cannot be made to the parts fractured.

He stated that we applied, in a fan-shape, adhesive plasters *over the bellies of the muscles to be overcome*, and then made continued extension from their united inferior ends, by means of a cord, pulley, and weight. The manner of applying the adhesive straps we illustrated by several fine cuts. That this mode does not differ from all other modes of treating these fractures, requires and demands something more tangible than ridicule to prove to the contrary, particularly as the reviewer acknowledges it "to be a good one."

We should have thought the character of the sentence against which he enters his protest would have suggested to him that some qualifying word (apparently, for instance) had been omitted by the printer. We will add, for the information of the reviewer, that the patella, mentioned in our work, as treated upon this plan, yet remains firmly united after a period of fifteen months, which we think is quite unusual, to say the least, for one separated two and a half inches at the time of its fracture.

We come now to the reviewer's remarks upon our claims to having introduced some novel views of the pathology and treatment of diseases of the joints. The reviewer quotes what he designates as our "claims as distinctly formularized." The sentence he quotes is, however, simply a statement of what first arrested our attention, and led us to the investigation of the mechanical causes operating injuriously in joint diseases, and *not the discoveries themselves.* There is perhaps some excuse for this mistake, as the word discovery is used in the sentence in the sense of first noticed.

The claim, as distinctly stated by us, can be found on page 206 of Conservative Surgery, and is as follows: "We consider it fully established, *that when disease about a joint renders the movement of that joint painful, it is always liable to be destroyed by uninterrupted pressure effected through the contraction of muscles passing over it. They do this by preventing the parts pressed upon from receiving nourishment, in the same way as a bedsore is produced.* This view was first brought to the notice of the profession in a paper read before the New York

Academy of Medicine in 1860." On page 210, there is a similar, but more comprehensive statement.

We consider this an important fact in the pathology of joint diseases, and as distinctly stated, notwithstanding the reviewer's assertion, "That they are not mentioned in the work."

As to pressure upon diseased joints, the reviewer's quotations from Beale, Ford, and others, apply *only and exclusively to pressure from the weight of the body*, and *not to that effected* by the contraction of *the muscles passing over the joint.*

In his quotation from Ford, he (Ford) expressly says, in reference to morbus coxarius: "Nothing can be clearer than that patients must feel ease and advantage from every expedient to prevent *the weight of the body*, in any degree whatever, from pressing on the joint." But Ford goes further, and upon the next page says, "and that this shortening of the limb *does not depend* upon spasm and *contraction of the muscles.*" Here he expressly denies what the reviewer by implication asserts.

The reviewer quotes Beale as saying in reference to Delpech's apparatus: "Any benefit which may result from such an apparatus must be derived from the power of extension in overcoming the contraction of muscles." Is Beale speaking of the contraction of muscles in diseased joints? By no means; he is speaking of lateral curvature of the spine. In no instance does he speak of pressure as being effected in a joint through contraction of the muscles passing over said joint. All the quotations from authors made by the reviewer are not applicable, and do not in the most remote degree invalidate our claims to the discovery that the contraction of the muscles passing over a joint, holding it motionless, would destroy it by preventing the nutrition of the parts pressed upon, in the same way that a bed-sore is produced by pressure.

Even Sir Benjamin Brodie, although he used the cord, pulley, and weight, did not employ them as a remedial measure, neither did he recognise in any instance that the contraction of the muscles was a constantly acting force to destroy the joint. We have stated this case fully, and, as we conceive, fairly, in our work.

Drs. Harris and March both treated morbus coxarius by fixing the limb by the screw, seeking only rest to the joint, and anchylosis as the best result.

This certainly does not look like an effort to effect an entire separation of the head of the femur from the acetabulum, and to prevent all pressure from whatever cause during the whole period of treatment.

Here we leave the subject, with a consciousness of having endeavored to set the professional public right in regard to the truths we have advanced, with a firm conviction that the principles advocated in CONSERVATIVE SURGERY are destined to occupy an important place in the progress of things—not only in this, but in all countries where science and art are held in estimation.

Truly yours, H. G. DAVIS.

New York, May 15, 1867.

CHOLERA AND QUARANTINE.—We are requested to state that it was not the intention of Prof. C. A. Lee, in his resolutions upon cholera and quarantine offered at the late meeting of the American Medical Association, to express the opinion that all quarantine measures at our ports are useless in preventing the introduction of cholera into our country; for the disease had been kept confined to the lower bay of New York more than six months by such quarantine as then existed; but that, having once gained a foothold, no means short of non-intercourse could prevent its spread to other places.

THE ARMY MEDICAL BUREAU, AND THE AMERICAN MEDICAL ASSOCIATION.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—I am happy to learn officially that the unequal report of that part of the proceedings of the American Medical Association, relating to the resolutions on the Army Medical Bureau, was simply the result of unavoidable accidents. As, apart from any claim of equal justice, the action of the Association is an additional and special reason why the resolutions and the reasons then given for offering them, should be fairly presented and clearly understood, I respectfully request that the accompanying communication, with the original synopsis of remarks furnished previously by request, be published in the next number of your Journal.

"DR. BENJAMIN HOWARD, of New York, offered the following preamble and resolutions:

"'*Whereas*, There has been issued, and still remains in force, an official order from the Surgeon-General of the United States Army, prohibiting the communication of any medical or surgical information by any medical officer of the United States Army, to any person whatsoever, without special permission from the Medical Bureau, at Washington—thus appropriating, as far as the official power of the Surgeon-General can compass it, all the valuable experience and statistics of all medical men who have served in the various departments of the United States Army, to the exclusive use of the Medical Bureau. And,

"'*Whereas*, Under such arbitrary control, an official report has already been made, tending to create incorrect impressions, on scientific questions of great practical importance to the profession and to society. And,

"'*Whereas*, It is important to the reputation of all medical men who served during the war, that they have the opportunity of correcting such erroneous impressions by an examination of the original records. Therefore, be it

"'*Resolved*, That it is the opinion of this Association that the monopoly now exercised by the Medical Bureau over the medical and surgical records of the war, is contrary to the genius and catholic spirit of our profession, and obstructive to the highest interests of science and humanity.

"'*Resolved*, That the Secretary of War, or other proper authorities, be requested to direct that the original records of the Medical and Surgical History of the War be rendered accessible on certain regular days of each month, for purposes of scientific investigation to all medical men who have served as such in the army of the United States.'"

"In supporting the above resolutions, Dr. Howard stated that they were presented in the special interest of many members of the Association, and those not the least honorable, either on account of professional achievement or patriotic devotion. They contemplated alike the benefit of the profession, and of humanity throughout the world, no less than the greatest ultimate efficiency of the Statistical Department of the Medical Bureau. Many reasons were then stated at length why medical men who had served in the army should be allowed access to the records, at least of their own recent cases, of which the following is a synopsis:

"As the publication of the official reports is subject to political contingencies, such publication may be indefinitely postponed, or the project become totally abandoned.

"Meanwhile, a vast amount of unrecorded experience complementary to data in the Medical Bureau is being forgotten and lost. For though these together would furnish complete and reliable information, apart, each may be unreliable and worthless.

"Some members of this Association have been most carefully pursuing various and distinct lines of original investigation, and require each to study out the same cases in entirely different aspects. Should the promised

publication ever appear, no matter what its methods of classification, they cannot correspond to each of these original and separate lines of investigation, and therefore must, to at least the majority of such members, be simply worthless."

"Not a few of the best minds in the profession, having been officially prohibited any item of information, even so much as to whether certain late patients of theirs were dead or discharged, are kept at a steady halt in the midst of important researches, and valuable papers which otherwise might long ago have been in the possession of this Association, are consequently uncertain of ever reaching completion.

"Our professional brethren throughout Europe, apprehensive of instant and general war, are anxiously sending for the results of our recent and unprecedented experience; but those who otherwise would be best qualified to furnish to them and the future sufferers, the common charity they crave, are able only to echo the response of the Medical Bureau, and reply that it is contrary to the official order of the Surgeon-General to furnish any such information, until duly and officially published.

"The only plausible reason for this exclusive policy of the Bureau is, that it is necessary to the successful compilation of the Records. Two days of each month for opportunities of reference could not be a very serious source of delay. The Bureau would by such reference lose nothing; but it would thereby gain the superior advantages of comparison and correction from those best acquainted with the facts at the time they occurred, while it would obviate any tendency to that suspicion, which is inseparable from monopolies. In conclusion, our experiences during the late war, in so far as they may serve to ameliorate human sufferings, belong not exclusively to the Medical Bureau, to any State, or any country, but are the rightful property of the whole world."

These statements, noted nearly verbatim soon after they were made, interspersed with illustrative facts, constituted the more salient points of my remarks on that occasion. On referring to the printed report of my friend Dr. Woodward's speech, a single glance will discover that instead of being a reply *to*, it was a most successful diversion *from*, the principal questions presented, to a dutiful, but entirely gratuitous vindication of the "honesty," "ability," "humanity," and "conscientiousness" of the Surgeon-General, as if such were not the traditional qualities belonging essentially to that office.

In my friend Dr. Woodward's speech, I discover but two statements legitimately based upon the resolutions, or remarks preceding. The first, respecting the time of publication, was to the effect that within two months would be issued a catalogue of the museum, of about a thousand pages. To this my reply now is—The greater the volumes, the greater the delusion and the blunder, if, instead of furnishing just what is most needed in the manner alone in which it can be available, they be published as professional bulls, with such sacred and unalterable errors and misconstructions as may be found in the volume already issued.

The other, and the only one not anticipated in my first remarks, entitled "the still graver reason why the access asked cannot be granted," is, that it would be an additional obstacle to the adjustment of the claims of pensioners. In reply to this, by far the strongest and most pertinent objection raised, I would simply ask—suppose any one clerk in charge of any one set of books, under a particular officer, searches for a particular fact respecting a particular case, that fact being required by said officer for me—the original contributor; does that prevent or delay the adjustment of any pension any more than if the same, or a similar fact concerning the same case, be sought for by the same clerk, for the same officer, for insertion in the official catalogue of the Army Medical Museum? If the opportunity of a little additional reference, like that necessary to every item in the great compilation in progress, is totally objected to because it would delay the adjustment of pensions whose settlement is so imperatively "demanded by every consideration of humanity," by what rule of boasted "honesty," or "conscientiousness." has similar investigation been unremittingly pursued in each of the four thousand cases, the publication of which, in a volume of about one thousand pages, is promised us within the next two months? After careful attention to every attempt at justification, by the Medical Bureau and its agent, I am still waiting to discover the shadow of an honest reason why the medical men, who at every sacrifice of comfort, and frequently at imminent risk of their lives, operated upon and treated patients with most careful assiduity, and thus laid the foundation of the greater part of whatever is of any interest or value in the surgical and statistical department of the Bureau—why these men should be, as now they are, denied any and all information respecting any one of those cases which they have treated, and which they may have risked their lives to save.

B. HOWARD.

45 W. 31st st., New York.

Obituary.

JOBERT (DE LAMBALLE),

OF PARIS.

THE Paris *Gazette Médicale*, of May 4th, reports the recent decease of this eminent surgeon. His obsequies, which took place the Friday preceding at the church of the "Madeleine," were attended with great pomp, and an immense concourse of persons. Marshal Vaillant represented the presence of the Emperor. The Imperial Academy of the Sciences and the Academy of Medicine testified by the attendance of their respective presidents and members the high and honored position which Jobert occupied as a member of these scientific institutions. The Paris School of Medicine was represented by a deputation of professors and assistant professors in their robes, headed by the Dean of the Faculty. Several funeral discourses were pronounced over the corpse:—Dr. Conneau, first physician to the Emperor, spoke in the name of his Majesty; M. Gosselin in the name of the Paris School of Medicine; M. Legouest expressed the feelings of the Academy of Medicine; and M. Arnal those of the personal friends of Jobert. The sad misfortune which overtook this great and distinguished man before his death, is known to all. In the wreck of his intelligence were explained those eccentricities which frequently characterized his private life. He commenced his medical career in 1819, from an humble origin, with an imperfect education, and in extreme indigence; with an intellect brilliant and ardent, dominated by an inflexible will and fixedness of purpose in the pursuit of distinction, and the attainment of excellence in his profession, Jobert had many warm friends, and some bitter personal enemies. By his irresistible will and unremitting application, he attained to distinction, and the possession of a most ample fortune. As surgeon to the Emperor; member of the Imperial Academy of the Sciences; of the Academy of Medicine; member of the Institute of France; commander of the Legion of Honor; professor of the School of Medicine at Paris, Jobert was suffi-

ciently entitled to the mortuary pomp and splendor which commemorated the respect of the French nation, as evinced through its high dignitaries and scientific bodies. The application of his physiological researches to wounds of the intestines by the immediate contact of their serous surfaces, originating the extensively-adopted procedure called the suture by "invagination;" his important advances in the treatment of vesico-vaginal fistula by the method called that of "glissement," though far surpassed by the inventive genius of American surgery; his numerous publications, and his brilliant operative skill; these are distinctions which claim for Jobert the regard of all medical men.

New Publications.

BOOKS AND PAMPHLETS RECEIVED.

AN ESSAY ON THE CLIMATE AND FEVERS OF THE SOUTHWESTERN, SOUTHERN, AND ATLANTIC STATES. By JAMES C. HARRIS, M.D., of Wetumpka, Ala.

REPORT, TO THE INTERNATIONAL SANITARY CONFERENCE, OF A COMMISSION FROM THAT BODY, ON THE ORIGIN, ENDEMICITY, TRANSMISSIBILITY, AND PROPAGATION OF ASIATIC CHOLERA. Translated by SAMUEL L. ABBOTT, M.D., Physician of Mass. General Hospital, etc.

THE WINE CULTURE IN CALIFORNIA. By H. GIBBONS, M.D. San Francisco. 1867.

THIRTEENTH REGISTRATION REPORT OF RHODE ISLAND. 1865.

MECHANICAL SURGERY. By E. D. HUDSON, M.D., N. Y. 1867.

Medical News and Items.

DR. DANIEL G. BRINTON, formerly Surgeon and Brevet Lieut.-Col. U. S. V., has become an associate with Dr. S. W. Butler, editor *Phila. Medical and Surgical Reporter*.

DR. MARTYN PAYNE, the venerable Professor of Materia Medica in the University Medical College, has retired from the active duties of his chair, after an acceptable service of twenty-five years, and is now Emeritus Professor. His successor, Dr. William H. Thompson, brings eminent qualifications to the position.

NATIONAL ASYLUM FOR DISABLED SOLDIERS. — The Board of Managers have decided to purchase the Ohio White Sulphur Springs property, near Columbus, Ohio, as the Central Asylum; Dr. C. M'Dermont being elected medical officer. From a Washington despatch to the newspapers we clip the following, which gives much useful information:

The Board of Managers of the National Asylum for Disabled Volunteers gives notice that it is now prepared to receive beneficiaries into the branches located near Augusta, Maine; Milwaukee, Wisconsin; or into the Central Asylum, near Columbus, Ohio. Volunteers are admitted upon application, by letter, to either of the managers, whereupon a blank application will be sent to the applicant, and, if duly qualified, transportation will be furnished him. The requirements are: First, any honorable discharge from the volunteers. Secondly, disability by wound received or sickness in the line of duty. If the applicant is unable to travel, or for other sufficient cause, relief will be furnished under direction of the manager to whom application is made. Overseers of all alms-houses and charity hospitals, having disabled soldiers subsisting upon private beneficence, are respectfully urged to report such cases to either of the managers, as it is not fit that meritorious disabled soldiers of the nation should be supported by private or public charity. Soldiers are especially informed that the asylums are neither hospitals nor alms-houses, but houses where subsistence, care, education, religious instruction, and employment are provided for disabled soldiers by the Congress of the United States, to be paid for by forfeitures and fines of deserters from the army. The provision is not a charity. It is a contribution by bounty-jumpers and bad soldiers to the brave and deserving, and is their right. Soldiers having a wife, child, or parents dependent upon them, are not required to give up their pensions upon coming to the asylum. Other soldiers are required to assign their pensions to the asylum, in special cases only, to be determined by the Board. Suitable compensation will be given for profitable labor in the asylums. Good behavior will insure the kindest treatment. Wives and children will not be cared for at the asylum until after a soldier has shown his ability to aid himself and them in part by his labor and steadiness, so that taking his family in charge will not increase his expenses to the asylum above the cost of other helpless beneficiaries, in which cases provision will hereafter be made.—*Cinc. Lancet and Observer.*

NEW LUNATIC ASYLUM IN OHIO.—An act has passed the Legislature of Ohio to establish a lunatic asylum in the south-eastern part of the State. No location is as yet selected.

ASYLUM FOR AGED INDIGENT FEMALES.—Dr. F. A. Burrall has been appointed attending physician to this Institution, *vice* Dr. James S. Cooper, deceased.

THE QUARTERLY JOURNAL OF PSYCHOLOGICAL MEDICINE AND MEDICAL JURISPRUDENCE, is to be the title of a new medical Periodical to be issued on the 1st of July next.

The contents will embrace: 1. Original articles on the Physiology and Pathology of the Mind and Nervous System, and on questions of Medical Jurisprudence. 2. Selections and Translations of Memoirs from Foreign Journals. 3. Reviews and Bibliographical Notices. 4. Chronicle of the Physiology and Pathology of the Mind and Nervous System and of Medical Jurisprudence. It will be edited by WILLIAM A. HAMMOND, M.D., of this city.

CLIMATE AND DISEASES OF UTAH.—The eruptive fevers, measles, scarlatina, and small-pox prevail more or less throughout Salt Lake valley, but in general, epidemics are not common. The healthfulness of the climate, and the manner of life of the Mormons, are not favorable to the production of disease. Physicians do not flourish in Salt Lake City. But two were living there at the time I left the valley, and both were in a state of destitution. The Mormon bishops cure all diseases by the imposition of hands, or themselves administer the remedies; they will not permit the services of a physician, and do not scruple to denounce the use of carnal means to promote recovery. The faith of the ignorant Mormon people should not surprise us, since we know that many diseases are self-limited, and hence the efforts of the bishops and elders seem in most cases to be successful. The Mormon belief in the efficacy of prayer is quite as sensible as the blind confidence of many intelligent people in the dicta of Hahnemann. The absence of morbific causes, and the healthfulness of the climate, render the valley of the Great Salt Lake especially desirable as a residence for invalids. There is probably no part of this country more favorable for consumptive invalids.—*Bartholow.* (*Cin. Lancet and Observer*).

PROVISIONS FOR THE PHYSICAL AND MEDICAL WANTS OF THE METROPOLIS in the tax levy adopted by the late State Legislature. Among the apportionments of

the tax levy we notice the following: City Dispensaries, $11,000; Donation to St. Francis Hospital, $5,000; to House of Good Shepherd, $5,000; Women's Medical College and Children's Hospital, $5,000; Donations, Five Points House of Industry, for a Working Women's Home (provided the same sum is raised by private subscription within 1867), $20,000; donations, Institution of Mercy, Houston street (on condition an equal sum be raised by private donation in 1867), $30,000; donations to the blind, distributed by Commissioners of Charities, $20,000; Northwestern Dispensary (when the same sum is raised from private sources) for new building, $15,000; for constructing Inebriate Asylum, $100,000.

A Substitute for the Stomach-Pump.—Dr. R. W. Park, of Mobile, Ala. (*Med. and Surg. Reporter*), calls the attention of the profession to a ready substitute for a stomach-pump. The apparatus consists of a common Davidson's India rubber syringe and a large size gum elastic catheter attached to it. By introducing the catheter (or what is still better, a stomach-tube) into the stomach, and attaching it to one end of a Davidson's syringe, the stomach can be filled in a few seconds with water, and by reversing the syringe as quickly erupted.

Diet for the Infant.—The best of all diets for an infant who cannot have the breast, is one part of cream, two or three parts of water, according to the density of the cream, and enough sugar to make the mixture very sweet. The chemists who have analysed the milk produced by various animals, tell us that the fluid produced by the woman and the ass contain the smallest amount of curd, and that both are very saccharine; and experience tells us that the mixture recommended above, forms the nearest approach to the maternal fluid.—*Dr. Inman, (London Medical Mirror).*

An Item in the History of the Removal of Ovarian Cysts.—"A woman, betwixt twenty and thirty years of age, had been tapped twice for an ascites, and a large quantity of water taken away at each time; but after the last operation the puncture did not heal, and in a little time, a substance they did not understand protruding, I was desired to see her. It was evidently a part of a cyst, and, as it had already dilated the sore, I persuaded her to let it alone till the opening became larger, in hope of a better opportunity of affording relief. Accordingly, in ten days or a fortnight the protrusion was much larger, and by the help of a dry cloth a cyst that would contain five or six gallons of water was gradually extracted. More than a quart of matter immediately followed, and more was daily discharged for some time, yet the woman recovered without further trouble than keeping the parts clean, and afterwards bore several children."

We have extracted the above from that interesting and valuable work written by Thos. Kirkland, entitled, "An Inquiry into the Present State of Medical Surgery," published in London in 1786, vol. 2, p. 195. We give it as an interesting item in the history of the removal of ovarian cysts, and we may further add that in the appendix to the same volume, p. 570, Mr. Kirkland makes the following proposition:

"We have given an instance, p. 195, where a cyst being taken away cured an ascites; and seeing medicines do not avail in encysted dropsies of the abdomen, is it not worth our while to consider whether, when they are unconnected with the adjacent parts, after taking away the water, the patient might not sometimes be cured by enlarging the puncture, pressing the cysts forward, and draining it out?" He then proceeds to examine the difficulties in the way and the objections which may be brought against the operation, and thus concludes: "At present, I offer these hints to those who think the subject deserving attention, and time will probably determine the question."

Eighty years have passed since the above was published, and time has determined the question, and that, too, most emphatically in favor of Mr. Kirkland's proposition.—*Exchange.*

The Signs of Age.—But the aged are far more readily pulled down by medicine than the young. An aperient dose which will make a lad more lively than before, will give his father half a week of flatulency; and the blue-pill which was thought to clear the liver of the juvenile *bon-vivant* is sure to promote biliousness in the senile feaster. Those who in advanced years go to the druggist for a calomel purge to clear away the remains of some aldermanic feast, are those most apt to die suddenly of apoplexy, and that which has long been trusted as a valued friend, becomes at length the deadliest of enemies. But there is another point connected with advancing years which we must advert to, tender though the ground may be. There is a time in the life of a woman when Nature sets a limit to her power of reproduction. There are few like Sarah, who become mothers in old age. In man, however, there is no such limit. Abraham, we are told, had a family by Keturah after his first old wife was dead; and though the aged David could lie quietly by the lovely Abishag, at the age of eighty, or thereabouts, yet the story runs that "Old Parr" was arraigned at a still more advanced period of his life for having violated some young woman. A wide experience of the world tells that marriages occasionally are solemnized between aged men and young wives, and are sometimes followed by a family, whose paternity is undoubted. This being so, there is a general belief that men usually carry into years the powers they have in youth, and they consequently try to demonstrate year after year to themselves that no sign of age has yet fallen on them. I once heard, with the most profound disgust, an old colonel of seventy-five say, in a mixed company, that his fourth wife was as well treated as his first, and his tone and manner showed how proud he was of making the boast. A few months only elapsed ere he succumbed to an attack of fever, apparently mild.—*Thomas Inman, M.D. (London Medical Mirror).*

The City of Austin, Nevada, is six thousand feet above sea level, where the air is so thin that the least physical labor causes great shortness of breath, and the atmospheric pressure is so light that those of its four thousand inhabitants who find it necessary to wear artificial teeth experience extreme difficulty in keeping their sets in position.—*Sci. American.*

An Extinct Race.—One of the most remarkable races that ever inhabited the earth is now extinct. They were known as the Guanches, and were the aborigines of the Canary Islands. In the sixteenth century, pestilence, slavery, and the cruelty of the Spaniards succeeded in totally exterminating them. They are described as having been gigantic in stature, but of a singularly mild and gentle nature. Their food consisted of barley, wheat, and goat's milk, and their agriculture was of the rudest kind. They had a religion which taught them of a future state, of rewards and punishments after death, and of good and evil spirits. They regarded the volcano of Teneriffe as a punishment for the bad. The bodies of their dead were carefully embalmed and deposited in catacombs, which still continue to be an object of curiosity to those who visit the island. Their marriage rites were very solemn, and before engaging in them the brides were fattened on milk. At the present day, these strange people are totally extinct.—*Med. and Surg. Reporter.*

Original Communications.

OUR PRESENT EXACT KNOWLEDGE OF THE CAUSES OF CHOLERA.

READ BEFORE THE NEW YORK MEDICAL JOURNAL ASSOCIATION,

By M. HERZOG, M.D.,

OF NEW YORK.

The history of our knowledge of the propagation of Cholera can be divided into two periods. I. From the year 1830 to 1849, and II., from 1849 to the present time.

This first period is distinguished according to the metaphysical tendencies of that time, more by abstract doctrines and the statement of facts without connecting causes and effects, than by any systematic attempt at scientific investigation. We find after every epidemic in every part of the world the medical profession divided into two great factions, contagionists and anti-contagionists; and their respective opinions, formed on accidental and general impressions, or through prejudicial teachings of men high in professional authority, and never discussed on the merits of their own case, but only on the weakness or shortcomings of the others, have found the best reflex in the public opinion on the prevention of Cholera. The people, bewildered by the great mortality of every Cholera Epidemic and the apparent ignorance of the physicians, resorted to such extraordinary preventive measures as the wearing of amulets and drinking Cholera drops, to fumigating the air with suffocating bonfires, and sending tobacco-smoking soldiers through infected streets. In some places of Italy the fanatic ignorance has reached such a point, that physicians and Jews have been murdered upon suspicion of poisoning the wells and producing the disease. But prominent and good observers of the nature of the disease have been found at all times, and even this period of conclusions post facta has produced some records and essays on Cholera which have been made the basis of future exact and natural scientific investigation.

To English writers, as Jameson of India, Simpson, Parkes, Budd, and many others, more than to all continental writers of that period, belongs the honor of a correct and comparatively true interpretation of the causes of the Propagation of Cholera.

A curious historical fact may be here briefly alluded to: The very first report made in Europe, 1829, by twenty-four Russian physicians sent by the Russian Government to the Asiatic frontier to study and observe the nature of the approaching disease, and published by Prof. Tilesius, 1830, has the following conclusion: "I do not know much about fixed and volatile contagion, but the fact seems to me very important, that Cholera is positively infectious through privies."

The epidemic in Great Britain, 1849, brings us to the second period—to the period of our more exact and scientifically connected knowledge of the causes of Cholera.

Snow's and Simon's very valuable and positive demonstration of the influence of drinking water from wells and aqueducts polluted with sewers from privies, must be considered as the first link in our future chain of exact knowledge.

Farr's excellent tables on the difference of mortality of Cholera according to the elevation of the ground, are also truthful contributions to our exact knowledge, when the nature of the ground and the communication are comparatively the same.

A very interesting feature of the epidemic in England, 1849, was the attempt of eminent men to give a distinct, fixed expression as to the nature of Cholera poison through researches of the microscope; but it failed totally, and had the evil result of bringing this doctrine into distrust, particularly amongst the eminent men in this country. The fault was not in the inert truth of the fact, but in the unmethodical and unsystematical way of investigation.

Britton and Swayne reported to the Bristol Society of Physicians that they found ring-formed objects which have not been discovered in other evacuations. Budd examined the drinking water of the infected districts and found similar objects, each of the gentlemen giving different names, according to his own impression, as, Cholera cells, Cholera fungi, and Cholera sporuli.

Baley and Gull, in a report to the College of Physicians, in London, denied the existence of every one of the objects seen by the Bristol Committee as characteristic of Cholera, and maintained that they might have been introduced into the system by food or medicines, and were not to be found in Cholera foci.

A later German critic believed that the Bristol Committee had seen eggs of helminths, and another eminent microscopist exclaims in despair, that he cannot make out what the different objects were, these different men in England have seen and described.

The great idea of fermentation so ingeniously illustrated and described by Liebig in his Chemical Letters and the Doctrine of the Origin and Growth of Spores, a distinct science, so extensively cultivated in France and Germany, seems not to have been the foundation relied upon in the English investigations.

The epidemic, 1854, found in England superior sanitary officers, with excellent advantages derived from the published Report of the Causes of Mortality of Cholera in 1849, and prepared with practical preventive measures.

In Germany, 1854, we find the old difference of opinion on theoretical points; no sanitary preventive measures whatever, care and hospitals for the poor, physicians and medicines free of charge, a police order against sour beer, unripe fruits, and old meat; excellent measures, as Pettenkofer remarked, the whole year round, but it was nothing specific against Cholera.

The intensity of the epidemic in Bavaria, 1854, was great; 16,000 well marked cases, with the usual mortality of 55—60 per cent. This epidemic was fruitful of great scientific investigations and the most important practical results.

Professor Pfeufer, the well known clinical teacher and the most experienced in personal observation of Cholera all over Europe from 1830 to 1854, was in 1854 as non-committal on the causes of propagation of Cholera in his clinical lectures, as we have seen our distinguished Professor Clark in 1866; but one thing was clear to his mind, that this problem could never be successfully solved by sanitary officers or physicians alone; that the specific laws, regulating this universal specific and uniform disease, could only be interpreted by the high-priests of medicine—that is, the leading minds in natural sciences.

Meteorology, Geology, Chemistry, Zoölogy, Botany, Microscopy, and Pathological Anatomy, were represented in this scientific commission by the most eminent of German natural philosophers; sanitary officers and physicians, in distinct contrast to former and later reports, taking only the part of co-workers and faithful reporters of facts, but not of expounders of "post hoc, ergo propter hoc" conclusions.

The axioms laid down by this commission have become, as you will easily perceive, international property. The leading and comprehensive mind of this commission,

Pettenkofer, who is a strictly positive and ingenious scholar, has become, by his unsurpassed and excellent essays onthis and similar subjects, the attractive centre of all medical and sanitary authorities of the present time.*

I may close my remarks on this general subject with the same words as I closed a communication to the Sanitary Committee of this city more than a year ago. "The value of this scientific report has made it a standard and a guide for future investigations and actions."

The actions, as you well know, have been faithfully and successfully executed by the Sanitary Committee—the future investigations belong to the specialist of our profession.

In bringing before you the leading points essential to produce Cholera, I shall keep myself strictly to the three fundamental laws laid down by Prof. Pettenkofer, leaving out the fourth law—the individual disposition—the physiology and pathology of which has not advanced enough for exact knowledge.

I shall endeavor to illustrate each point by our actual and practical experience, acquired in the last and former epidemics.

I. The specific germ is propagated in Cholera Diarrhœa, or in the evacuations of persons coming from places infected with Cholera.

This term, "specific," has been given to Cholera by a thousand-fold repeated observations of its nature, and by hundreds of excellent observers.

I will now inquire into the exact nature of "specific germs," in contrast with other intestinal evacuations.

The discharges of Cholera, and the rice-water and primary diarrhœa, have invariably an alkaline reaction. The diarrhœa, in contact with other organic matter, particularly excrements, has the power of undergoing a chemical process (fermentation), producing an enormous *fauna*, in contrast with other evacuations under similar conditions—a fact described after careful comparisons by Prof. Siebold, the greatest zoologist of Europe.†

This diarrhœa, in itself harmless, undergoes first a chemical process that gives it the property of a metabolic poison, with reproductive power; secondly, this metabolic poison has a time of incubation, exhausts its effects on the organism with one attack, that is, imparts to the same an immunity for a long time after. Ingenious and successful experiments of infection on animals, producing the characteristic symptoms and anatomical alterations, made by Lindsey in Edinburgh, and by Thiersch in Munich, under the direction of eminent chemists and anatomists, give the most important evidence in favor of the term specific, in contrast with other evacuations not having this infecting power, and in contrast to absolute contagious diseases like measles, scarlatina, smallpox, producing apparently at once a "ready-made" contagion. Without anticipating, I may briefly state here, that Pettenkofer and Thiersch, in 1856, advanced the idea, that this cholera ferment must finally produce an organic cell or spore, embodying the propagating power, and that Liebig, in a popular essay,‡ expressed his decided opinion that the whole cholera process is to be found in a yeast-spore. I would certainly rely on such interpreters of natural phenomena in organic chemistry. I may plainly ask you, "Who knows better?"

This distinct characteristic symptom for Cholera and diarrhœa may have been sufficient for the term specific; but the last epidemic of 1866, in Austria and Prussia, brought forward the most interesting and surprising facts, corroborating fully the above investigations and opinions. I hope that in due time a more competent person will be found to explain to you the microscopical details, and I will to-day only lay before you the most important results with the drawings of both works.

Klob's studies on Cholera, published this year in Vienna, have been made with the view of comparing the different consecutive stages of Cholera, from diarrhœa to rice-water stools, with the evacuations of other patients, taking dysenteria, typhus, marasmus of children, simple diarrhœa, and healthy fæces, as the bases of his microscopical and comparative chemical investigations. It is a well known fact to you, that spores in different forms have been found in muguet, and sarcina in the stomach, and certainly in the mucous membranes of the intestines, connected with physiological functions and pathological processes; but Prof. Klob discovered in Cholera dejections such enormous quantities of spores and fungi extending gradually from the œsophagus over the stomach down to the intestinal canal, as to form a perfect gelatinous substance in the intestines (called in zoological terms "Termo Zooglea," spore-bed) and not to be mistaken for mucus or albuminous aggregates.

This form of fungi, its quantities, and its distinct, characteristic, genetical progress, has never been before observed or described, according to Klob, by any other authority, in the intestinal discharges, from the first slight discharge to the rice-water stools. Klob describes the different consecutive phases of the organic life of the spores, and maintains that in the last stage they have lost their peculiar movements, and losing the characteristic aspect, undergo the decaying metamorphosis of all spores which is called by zoölogists bacterian gelatina.

Klob promised to publish in his next paper the results of experiments with the characteristic Cholera fungi in regard to its breeding properties.

Independent of Klob, in Vienna, and in the same month, February, 1867, we find published at Berlin (Virchow's Archiv,) by Dr. Thomé, Professor of Botanical Zoölogy, the discovery of a new exotic yeast-spore, specific to Cholera, bred, nursed, and fructified in the different stages of Cholera and diarrhœa, in living persons, described, defined, and designed in accordance with Klob's results, only more practically characterized, and the spore's lifetime more brilliantly interpreted and illustrated. With true scholar-like enthusiasm, he baptized the new foundling with an endless number of Greek and Latin names.

For the careful student of Cholera, the origin, existence, and decay of this spore, are the most interesting photograph, a perfect miniature picture of the laws regulating the propagation of Cholera, as will be seen by taking into account the necessary time to fructify (represented as incubation); the tendency to multiply and fructify, when taken from the first stages of diarrhœa (a danger long ago pointed out by Pettenkofer); the intensity of multiplication, under more or less favorable conditions of fermentation (expressed in Pettenkofer's infectious focus); the shrinking and immediate stopping of vitality in the least contact with mineral acids and metallic salts, and the perfect disorganization of the spore under the influence of 70 degrees Reaumer (prototyped as useful disinfectants); the relative insensibility and continuation of vitality under contact with alkaline solution (demonstrating the insufficiency of chloride of lime, so long recommended by sanitary officers); and a limited period of the spore's lifetime (the exact experience laid down in the Bavarian report of the limited time in which certain localities and their inhabitants are exposed to Cholera morbillity, and after this time the existing ferment has lost its specific danger).

The most important result of Klob's and Thomé's

* International Cholera—Conference at Weimar.
† Report on Cholera, by the Royal Bavarian Commission for Scientific Investigation, Munich, 1857.
‡ Augsburg Allgemeine Zeitung, 24 Jan., 1866.

investigation the fact that in the last stages of Cholera the spores are lost, their specific form, vitality, and have already undergone a decomposition, *not* exclusive, idiopathic of Cholera. Thomé could never succeed in cultivating and fructifying Cholera spores from the last stages.

We are not without analogous observations in daily practice: the epidemic cattle-plague, the infectious inflammation of the spleen (Melzbrand), have been positively explained and demonstrated by the presence of specific spores. The grape-vine and potato disease have each their defined and classified spore.

Thiersch made it an axiom for all metabolic poisons that the time of their propagating possibility was limited. There can be no doubt that scarlatina, measles, and hooping-cough have their times of contagiousness and non-contagiousness, only not so fully studied and demonstrated as in cholera.

The studies of incubation and quarantine are inseparably connected. There was never a Cholera quarantine in this country, from the first establishment to the present day. Quarantines have never been overleaped by the Cholera poison; the doors have been ignorantly left wide open. Cholera patients have been scrupulously guarded,—very innocent parties; but infected and apparently healthy passengers have been discharged during the time of incubation, *positively the most dangerous parties, propagating by their cholera-fructified discharges*, as disseminating foci, the disease as quick as railroads and steamers will bring them. From the ignorance of this law of propagation we are enabled to explain all the "mysterious subtlety of the volatile cholera-poison," so often alluded to by sanitary officers.

The infection of Ward's Island, November, 1865, by a nurse discharged from the cholera ship "Atlanta," and readmitted for a sore foot on Ward's Island, never suspected or treated, is fresh in the recollection of all.

Pettenkofer, more than twelve years ago, pointed out the great danger of slight diarrhœa, as cause of propagation,* and Klob's and Thomé's experiments have confirmed it as exact knowledge, that the last stage (rice-water) represents the state of the disease emasculated (non-contagious).

The many puzzling quarrels of contagionists and non-contagionists must be explained by these facts; the striking exemption of physicians, nurses, and washer-women, in regular Cholera hospitals, where mostly the last stages are brought in, is now better understood, and the mysterious, intense, volatile poison, supposed as propagated through distances, in the air, will invariably be found to have a very limited and localized focus established by a specific, perhaps hardly perceptible—diarrhœa.

Quarantines may be entirely abolished as impracticable for international and commercial intercourse, and disinfectants only relied on; but I warn you against the following lesson, taught to us in the Report of the Board of Health.

"Cleansing of the emigrants and their baggage, but not the absurdity of protracted detention, testing the limitation of infection self-productive, are required in the most absolute sense for the security of the public health, and scarcely less for the welfare of emigrants themselves." †

Obedience to the laws of nature may sometimes be inexpedient and impossible; but the above opinion could only have been formed in ignorance of our present exact knowledge.

The connection of disinfections with cholera-diarrhœa, so well known by the doctrines of Pettenkofer and great practical successes of sanitary officers, has been ingeniously confirmed by the experiments of Thomé; but the first case of infection in a given locality (house or institution) discovered, and disinfection is no protection any more for the inhabitants of the same place; *always practicable, always justified*, it leaves the people (inside the focus) to the mercy of their own personal resistance, differing only in time of incubation, and protecting the new arrivals from the action of the specific poison, and preventing further propagating possibilities.

The disinfections at Blackwell's Island, justified by every experience, and executed with practical promptness, are, in facts, dates, maps, time of morbillity and mortality, the best proof of the perfect inaction of disinfection at such a late period of the disease. Greater mortality has been perhaps prevented by hygienic measures ordered, making individual persons more resistible against the disease, but the specific cholera-poison has taken its usual time of waving intensity, for about four weeks after, independent and undisturbed by disinfections, it was limited only by the naturally acquired immunity of the inhabitants. I may safely assert that the conclusions drawn and indorsed by excellent names in this city on the Blackwell's Island disinfection, will at once be repudiated by Pettenkofer, as not warranted by our present exact knowledge of the natural course of the disease.

I come now to the second essential point for Cholera epidemic:—

II. *A soil impregnated with organic matter and permeable for air and water to a certain depth.* (*To the depth of the sub-soil water.*)

To meet in advance certain objections I must explain that the word 'soil' must not be exclusively taken; it is only in the largest scale the representative idea of certain chemical processes in combination with water and air. A sponge with a specific diarrhœa, a wooden bed-chamber, clothing, a wooden drain-pipe in an emigrant ship impregnated with specific diarrhœa, exposed to humid air, have been over and over again admitted by Pettenkofer as small, very circumscribed infectious foci. I must further mention that the objection made to the whole doctrine of this second point by Drasche, and quoted in Prof. Clark's Lectures and Dr. Burrall's book, has been already fully contradicted, 1861, as unfounded on facts.*

The comprehension of these differences of soil, in connection with Cholera diarrhœa, must for ever abolish strict contagionists and non-contagionists.

The soil, as the natural receptacle for human excrements, is, under the above conditions, the great chemical ferment-basis for spore-breeding, so beautifully imitated in Thomé's laboratory; while in contrast, the impermeability of the soil for water and air represents the chemical process so well known as Mummification, or Local Immunity against Cholera.

A number of charts, published by Pettenkofer in connection with the Bavarian Scientific Report, 1854, represent in differently-colored lines a large number of places inflicted with or exempted from Cholera, according to the permeability or impermeability of the soil for water and air, independent of mineralogical aggregations, but always influenced by physical compactness or porosity of the ground. Similar constant old exemptions have been observed in many places of the world, but never understood or explained on their scientific relations.†

* Unanimously adopted by the Cholera Conference, in Constantinople, March 21, 1866. † Pages 156, 157.

* Journal f. Biologie, vol i. page 11.

† Pettenkofer complained in one of his late writings that the charts are so little known amongst sanitary officers; they will have formed the most interesting feature in the Cholera Conference at Weimar.

These charts will definitively answer Prof. Clark's question in his lectures on Propagation of Cholera. Why, if Cholera is contagious, is it only contagious in Cumberland and Columbia, and not in other places where infected people have been communicated with, without producing an Epidemic? The infected or exempted localities in Pennsylvania must logically find their places under the blue or red lines of Pettenkofer's charts, but more than that, a study of the facts and ideas expressed by these differently-colored lines, based on unsurpassed exact investigations, makes us independent of all diffused generalities, as Cholera-fields, dampness, dirt, ill-ventilation, etc., helping only as intensifying, but never as producing causes.

We find this fact illustrated in our daily experience. Governor's Island and Hart's Island, U. S. military posts, as well kept as any similar places in the world, afflicted with Cholera. Tybee Island, a model of ventilation, we find a hot-bed for Cholera. Andersonville and Libby prison, verily cholera-fields, without the least suspicion of the disease.

An ill-ventilated, crowded tenement-house, with extraordinarily dirty inhabitants, may safely overcome the specific germ brought there if their excrements are washed constantly with fresh water, neutralizing as the most natural disinfecters the ferment process of a permeable soil; or immunity may take place, if their privies by fortunate accident are located on a piece of ground, where, by impermeability to humid air, mummification must take place. A excellent country-house—on porous soil and with unexceptionable sanitary inhabitants and regulations, may be visited by an unsuspected specific diarrhœa—the privies, in the house, behind or slightly inclining against the house, and a cholera-field is produced—a subtle mystery in general sanitary expressions.

Farr's Tables on the Influence of Elevation on Mortality of Cholera are the true index of actual facts, when the soil is equally porous, and the specific germ is disseminated through the soil.

Medical officers in India and the Crimea give very instructive lessons of the great danger of privies situated higher than the camping ground. The dissemination of liquid matter in a porous inclining ground takes place, not alone to a relative large extent, but with great rapidity. I know a case from personal experience, where two old bedridden persons in a village, without the least personal communication from without, both died in twenty-four hours of Asiatic Cholera; 200—300 feet above in a straight line a cholera focus existed. I reported the waves of the wind as the communicating medium; but Pettenkofer, not believing in dissemination of Cholera through the air at such distances, found by the aid of the axe and the shovel, that the greater part of the liquid excrements from the house above reached their last resting-place underneath the house so mysteriously afflicted with cholera.

In such exceptional cases the soil is not only the producer, but also the propagator of the specific infection to some distance, without the necessary personal intercourse. I suspect the house epidemic of the Broome street lawyer accused of a damp basement to have a similar specific connection.*

Pettenkofer's personal investigation and description of the Cholera in Switzerland gives us the facts of an intense epidemic in a high mountain village, with perfect immunity for the villages below; the difference in the permeability of the soil determined the infection or exemption. Cholera is independent of height or depth in an absolute sense of the word. Alluvial soil has been found to exist on the Alps as well as on the top of the Pyrenees. The greatest mortality in Europe, in proportion to population, was amongst the thousands of laborers during the building of the great Somering Mountain Railroad.

Pettenkofer visited this place. Besides the necessary conditions for Cholera—specific germ and porous soil—their terrace-like built huts had invariably their privies behind and above them. Fresh mountain air, unpolluted spring-water, regular employment, and wholesome food, had hardly any mitigating influence in presence of this ignorance of the laws regulating the propagation of the specific cholera-poison.

You will, of course, ask the question—How can Cholera prevail with fermentation as the fundamental principle, which never can take place in freezing temperatures many degrees below zero? In Russian, French, and German cities privies are *in* the houses or cellars, well protected against such low temperature; and Pettenkofer initiated the sugar fermentation successfully in such places during winter time. Open countries, and I believe the United States, with different arrangements for privies, have never been visited by Cholera during the winter season.

The greater part of this city (New York) is above the malign influence of a permeable soil in relation to epidemic Cholera. Our privies, constantly flooded with fresh water, are self-disinfecting, fermentation-preventing institutions. A case infected outside may end fatally in Madison Avenue, and by the very limited infectious focus of linen and clothing infect the nearest persons accidentally; but that powerful ferment (specific miasma) producer—the soil—is harmless for the greatest part of this city.

This, my personal opinion, I expressed long before the outbreak of Cholera in this city, and I see it fully confirmed from the mortality in streets and houses* during the last epidemic. No allusion is made or conclusion formed in the Report for 1866 on these, for many of our fellow-citizens, so important and consoling facts.

I give you the analogous experience made in my own native city, Munich, 1854, to justify my deliberately expressed opinion. During the whole intense epidemic, two houses, a poor-house and a penitentiary, situated on porous soil, surrounded by Cholera, without any restricted intercourse, without any disinfectants, the specific germ introduced (by light and fatal cases), the Cholera never took hold in the slightest degree, amongst the hundreds of generally susceptible people of this institution; a remarkable and surprising exception! Springs rising on the top of the hill were running in their course to the river below, beneath the soil of the two large buildings, and prevented, by constantly fresh water, the genetical and dangerous growth of the exotic sporet—the product of the specific Cholera fermentation.

Besides the striking analogy of these two institutions in Munich, and our Croton-water washed privies, such cases teach us the moral lesson, that sometimes apparent deviations in facts, with exact investigations, become convincing proofs of fundamental truths.

The practical conclusions on this second point are covered mostly by the well known doctrines of the constant preventive disinfection of every ground, before suspicious diarrhœa is contaminating the soil.

The plans in building of dwelling houses in relation to privies, the direction of cholera fugitives, may be guided by the exploration of the physical aggregations

* Cholera Report of Dr. Harris for 1866, page 167.

* Metropolitan Board of Health Report, pp. 283, 284, 85.

† In contrast to the spore produced by Cholera nostras (Virchow, Archiv, February, 1867.)

composing different soils. The selection of quarantine grounds for slightly infected persons has to depend entirely on the broad comprehension of this part of our exact knowledge of the causes of cholera.

In intimate connection with the study of the fixed composition of the soil is the third essential point for epidemic propagation of Cholera, as follows:

III. *Occasional increase and variations of humidity in this alluvial soil, manifested in the most plain and reliable manner by the different elevations of the sub-soil water (Grundwasser), the greatest danger being when the sub-soil water begins to recede from an unusual height.*

This doctrine covers the ground for timely (temporary) disposition of certain localities, cities, streets, or houses, and will be the scientific answer to the often-repeated, vexed question discussed by sanitary officers and newspapers—Shall we have epidemic cholera this year, or shall we, independent of quarantine and disinfectants, escape the danger of a well-disposed soil in connection with the fructifying growths of the imported exotic spores?

I say it will answer this question months in advance with great decision and scientific accuracy,* as Pettenkofer's interesting researches for the last twelve years, on this original subject, have taught, but only hydraulic engineering and geology combined can guide clinical and sanitary science in this direction.

Let me repeat, in a few words, the great ideas of the whole doctrine laid down by Pettenkofer from the experience of thousands of cases, from the personal investigations of over thousands of miles of different countries, from the intuitive studies of writers of all nations, guided only by natural science, and interpreted with the thoughts of a reflecting mind:—

1. The absolute necessity of a specific germ represented in the evacuations;

2. The presence of a well disposed breeding-place most extensively expressed in the alluvial soil;

3. The favorable or unfavorable time to bring this germ to a specific ferment, dependent on the well-defined local variations in the elevation of the sub-soil water.†

More, a great deal more, has yet to be learned; but we have a right to speak of *some* exact knowledge of the causes of Cholera.

ANEURISM OF THE ABDOMINAL AORTA.

By EDWARD T. CASWELL, M.D.,

OF PROVIDENCE, R. I.

In an elaborate and instructive article upon Internal Aneurism in the American Journal of Medical Sciences for January, 1867, by Dr. Liddell of New York, it is stated that abdominal aneurisms sometimes break into the left pleural cavity, and no reference is made to any other disposition above the diaphragm of the contents of the sac of an abdominal aneurism. In the following case an outlet was found into the right pleural cavity, and as the writer mentioned records no such instance, I infer that it is comparatively rare.

William A., of about thirty-five years of age, and of spare habit, had been treated for some months by several physicians for complaints which had been ascribed by one to the stomach and by another to the liver. In the month of September last I was requested about two o'clock in the morning to visit him, the messenger stating that he was suffering from "a swelling in his stomach which throbbed." As he resided some distance out of town I sent him an anodyne and promised to see him early in the morning. On arriving I found that he had died at 7½ A.M. He had been employed as engineer on a tug-boat, and was an industrious and temperate man. I learned that he had complained, while on his boat at noon on the preceding day, of severe pain, apparently in the epigastrium, and had been put ashore. He remained until 5 P.M. near the landing, and then walked an eighth of a mile up a hill to his house and then up-stairs. During the night he suffered intense pain and had, as it was stated, "two or three attacks of trembling with stiffness of the limbs." He got but little sleep; at times he would walk up and down in great distress, and then would lie down, but he could not remain on the bed. Ten minutes before he died he walked across the room and conversed with members of his family.

I made an autopsy twenty-six hours after death, and the following statements are taken from my own notes and from those of Dr. Mason, who kindly assisted me. Upon opening the thorax blood was seen to issue from the right thoracic cavity, and when the sternum was removed the whole cavity seemed filled with clotted blood and serum. Two quarts were removed. The lung was greatly compressed; indeed it seemed scarcely larger than my fist. In the posterior mediastinum, and extending down the course of the œsophagus, there was a firm clot which passed down through the œsophageal opening in the diaphragm. The left thoracic cavity presented nothing abnormal save some old pleuritic adhesions. The heart and the pericardium were free from disease. On inspecting the abdomen a large firm clot was found around the posterior cardiac surface of the stomach, glueing it and the intestines together. The adjoining portions of the peritoneum were much thickened. On breaking up the clot the aneurismal sac was exposed. It was developed about the cœliac axis, just above the superior mesenteric branch of the aorta, and projected from the left side of the latter. It opened into the aorta by a single mouth, three-quarters of an inch in diameter. It was composed of all the coats of the vessel and was somewhat larger than a goose-egg, having two pouches developed in its walls, the larger of which was about two inches long and one and a half inches in diameter. It was lined with several layers of lymph, and these in one portion formed a projection into the cavity—a stalagmite growth as it were—about an inch broad at its base and projecting three-quarters of an inch into the cavity. The walls of the sac were in some places quite thin, and the rupture had taken place in its upper or diaphragmatic portion. Being unable to rupture the peritoneum the blood had found a way for itself through the connective tissue, along the fibre of the œsophagus; thus passing up into the posterior mediastinum, had found some weak spot in the right pleura and poured itself out as I have stated, into the right thoracic cavity. The aorta was atheromatous, and deposits of a similar nature could be felt in the radial artery on both sides; portions of the aneurismal one were also found in a like condition.

It seems as if the diagnosis of an aneurism could have

* Vide Journal f. Biologie, 1866.

† A full exposition of all facts connected with point No. III. would have too much extended the purpose of this paper; but it may be interesting to state that the International Cholera Conference in Constantinople has acknowledged a real probability of Pettenkofer's opinion (Answer XXVI.), without knowing at that time that Pettenkofer, in his critic on "Macpherson's Cholera in its Home," has made the endemicity in India as dependent from the same natural law as a temporary epidemic is in Europe or in the United States. The Weimar Conference a few weeks ago, has unanimously adopted the truth of this point (No III.) after a brief personal explanation of its details by Prof. Pettenkofer; dissenting opinion (from Russia), based on negative results, being fully outweighed by the corroborating researches of Prof. Pölsch, extending his investigations of the sub-soil water, over six years in St Petersburg, and finding the relative influence on epidemic Cholera absolutely true.—*All. Zeitung, Mai*, 1867.

been very easily made in this case, if any careful examination had been instituted. That it could have attained such a development, and escaped detection, seems almost impossible. It would be interesting to determine if we could discover the relation between the subjective symptoms the last fifteen hours of life with the pathological condition developed, but that can only be a matter of speculation. It seems every way probable that the patient must have survived the rupture of the sac for some little time.

This instance of an abdominal aneurism opening into the thorax may perhaps with propriety be placed in apposition with a specimen to the Pathological Society of London by Mr. Pick, and reported in the *Medical Times* and *Gazette* for January 12, 1867. In this case a thoracic aneurism of large size discharged its contents into the peritoneal cavity. The evacuated blood followed down the muscular fibres of the œsophagus and penetrated the peritoneum close to the cardiac orifice of the stomach.

REMARKS ON THE TREATMENT OF FRACTURES OF THE PATELLA.

WITH A DESCRIPTION OF THE LATE DR. THOMAS TURNER'S APPARATUS.

[By FRANCIS V. WHITE, M.D.,

OF NEW YORK.

Sir Astley Cooper* believed ligamentous union resulted in fractures of the patella, generally; rarely osseous. He arrived at this conclusion, from his experiments and observations on the rabbit and dog, having produced fractures of usual varieties in both; in different periods of time noted efforts of nature in reparation; he states that there is no callus to interfere with the joint; and advises that the surgeon should make the ligament short as possible, for the welfare of the patient, in transverse fractures. He presents two modes of treatment: 1st, he places the patient in semi-recumbent position, with the extremity on a well padded posterior splint, leaving the knee exposed, to combat inflammation. When proper, he bandages to the knee, then makes a sufficient number of circular turns below and above the joint, approximates these and thereby the fragments, by broad tapes at right angles and under these on each side, being tied together. He cautions any violence in bringing the upper fragment down. 2d, the leg being bandaged, he places a leather strap around thigh above the fracture, from this, a strap around the sole of the foot up to the thigh-strap and kept in place by tapes.

The treatment continues five to six weeks, then cautious passive motion is made, until use of the limb is acquired. He says he saw the patient of M. Chopart at Paris, who appeared to have bony union, and mentions a case published by Mr. Fielding of Hull.

He considered the absence of perfect coaptation of the fragments in these fractures, to be the cause of non-ossific union.

Mr. Gulliver,† also made elaborate investigations of the powers of nature, in the artificial fractures he made of the patellæ of rabbits and dogs; concluding, in fracture of the patella, if the aponeurosis is entirely ruptured, no bony union results. The inter-substance is vascular, therefore the absence of bony union is not from proper nourishment. Bony union results from perfect adjustment of the fragments, if the aponeurosis is not entirely divided. Fibrous tissue precedes bony. His object was to demonstrate what results we might expect in treatment of fractured patella. He suggested no apparatus.

Mr. W. Adams,* in a paper before the Harveian Society, refers to having presented before the Pathological Society of London in 1850, two specimens of fractured patella.† One, true ligamentous union; the other an ununited fracture. He had not seen a separation of over one and a half inches in true ligamentous unions, usually half to one inch. He alludes to Mr. Holthouse's‡ specimen, presented subsequently, of two and a half inches. What he calls ununited fracture, previously was considered elongated ligaments; he proved it to be a thickening of the fascia, and aponeurosis, and bursa. Length of second specimen was five inches, a line to one eighth of an inch in thickness. Of thirty-one specimens he examined in the six principal museums of London, fifteen were ununited, twelve ligamentous, and four obscure from being dried. He suggests in the treatment, 1st, subdue inflammation; 2d, approximate the fragments as soon as possible; 3d, retention sufficient time, to insure true bone, or short ligamentous union, avoiding eversion of the fragments, and a slipping of the fascia, aponeurosis, etc., between, that being the cause of ununited results. Recommends M. Malgaigne's apparatus in treatment. Notes its extensive use in France; that no serious inflammation was produced by its use; generally borne without inconvenience or pain. May, 1853, M. Malgaigne informed him, the hooks had been used eleven times with complete success. He used them in one case of ununited fracture of patella of long standing, detaching by subcutaneous section the aponeurotic structures, coaptated the fragments, with the hooks. Borne for two weeks without inconvenience. Greatly improved. Result not given.

Mr. Malgaigne § has an ably written article on fractured patella. He thinks thirty to forty days' treatment sufficient for fibrous or bony union. Calls attention to the danger of anchylosis; as varying, from degree of inflammation, time of confinement, pressure by the apparatus, whether the apparatus was applied before or after inflammation. The greatest separation he knew of, was the case of Sir A. Cooper, viz. over four inches. Alludes to Gulliver's investigations, also Sir A. Cooper's. Never applied apparatus until inflammation was subdued. Removed it in forty days, anchylosis disappearing shortly.

Observing the inefficiency of the apparatus for ossific results, he invented his hook apparatus, which consists of two steel plates; inner one, one and a fifth inches in length, on account of the obliquity of the patella, two-thirds of an inch wide, free extremity bifurcated into two very sharp hooks, one-third of an inch apart; outer one, one inch long, same width as inner one, hooks two-thirds of an inch apart. Sliding of the plates upon each other regulated by a screw. Apply the hooks of inner one first, just below the point of the patella, drawing the skin down somewhat, then coapt the fragments, drawing the integuments up, insert the outer hooks just above the base, using force, by the screw; an improvement of M. Charrière, which the patient cannot tamper with, the plates slide upon each other approximating the fragments. The only ill he observed, was that the upper hooks slipped about the seventeenth or twentieth day.

* Sir A. Cooper's Treatise on Dislocations and Fractures of the Joints. American Ed., 1844, p. 201.
† Edinburgh Medical and Surgical Journal, vol. xlvii., p. 160.

* British Medical Journal, vol. i., 1864, p. 245.
† Transactions of the Pathological Society of London, vol. ii., 1850, p. 254.
‡ Medical Times and Gazette, vol. i., 1862, p. 231.
§ M. Malgaigne on Fractures, Packard, 1859, p. 599.

Dr. Packard,* of Philadelphia, publishes a case of transverse fracture of the patella, which he treated successfully with the hooks. He, assisted by his friend, Dr. Brinton, could not perforate the patella to the joint, by violence, with the hooks, on the cadaver. He believes if the hooks are properly applied, there is no danger of the slipping Malgaigne spoke of. He concludes from his case, that there is no fear of ulceration or necrosis. The pain is not severe in the application of the hooks. Anæsthetics could be used, if necessary. Esteems the hooks the best appliance for firm coaptation of the fragments. Other modes, apt to have a tilting-up of the fragments, viz. a V gap between.

Coaptation, tested by hooks and bone moving as one mass. Dr. Ellis, Boston, informed him of the estimation of the hooks, "They are not liked here, and never used." Dr. Noyes, New York, wrote to him, 1854, that Dr. Buck had used the hooks, and that such inflammation resulted in two weeks, that they had to be removed. Abscesses formed about the joint, which prolonged the treatment twice the usual period. Result, bony union. The joint was quite rigid when the patient was last seen. "This case was pretty generally known among New York surgeons, and its results proved condemnatory of the hooks." Dr. Packard† publishes the same case, refractured, about six months subsequently. On the first occasion, he applied the hooks the eighth day, retained them thirty-one days. There was good use of the limb in two months' time. Second time retained them twenty-nine days.

Eighty-six days following, inter-substance was not more than half an inch. No halt in gait, only in going up and down stairs. Believes he had bony union on first occasion, as a sharp crack was observed when last fracture occurred, and from his manipulation of the fragments he was satisfied of it.

Campbell de Morgan,‡ F.R.S., Surgeon, Middlesex Hospital, states M. Malgaigne's hooks had been used frequently and satisfactorily. Mr. Henry, his colleague, directed his attention to cases where there probably were bony unions. He appears to esteem the hooks as highly as Dr. Packard. Relates a case where both patellæ were fractured; one treated by the hooks; other, by position. Result of former pretty closely approximated; latter, the separation from half to three-quarters of an inch. Another case; female, far advanced in pregnancy; hooks were applied; nothing unfortunate occurred; still under treatment. Only objection he makes is the tendency to a V gaping of one-eighth of an inch superiorly, which, he remarks, can usually be avoided by altering direction of the upper hooks. If the parts are kept at rest, he considers the hooks free from irritation, as metallic sutures are.

G. E. Pyle,§ House Surgeon to Middlesex Hospital, records eight cases treated by Malgaigne's hooks; commends them; closes with a synoptic table of sixteen cases, eight treated by Malgaigne's hooks, and eight by the usual means.

J. M. Chelius,‖ University of Heidelberg, mentions the separation in transverse fractures of the patella may be four to five inches. Crepitation is not observed, as the fragments cannot be immediately approximated; may, in vertical, oblique, or splintered varieties. Quotes Gulliver's conclusions. Believes treatment results in a fibrous inter-substance, on account of the difficulty of perfect coaptation of the fragments. He condemns as unsuitable, especially tight bandages, as producing anchylosis and adhesion of the patella with the femur, also liability to atrophy of quadriceps femoris, a termination to be deprecated more than a long inter-substance. His treatment, mainly by position, the extremity flexed on the body, and the body on it, pillows being placed under the extremity and the trunk, binding lower portion of the thigh, and fastening to the bed, the fragments being thus pretty easily coapted; or a long posterior splint, with footboard well padded. Cites Alcock's application of adhesive plaster, with his mode, as advantageous. If there is powerful muscular action to be overcome, his appliances are complicated and cumbrous, viz. the fragments being coapted, pads are placed above and below, and retained by figure-of-eight bandage; over the whole an invaginated bandage is fixed longitudinally.

Liston asserts,* in transverse fracture of the patella bony union is rare, "one not to be expected or favored," Treatment by position, on an inclined plane; apply a bandage from toes to above the fragment, not tight. Objects to form figure-of-eight, bandaging over compresses of cork or other material, or straps and buckles.

Skey† advises in transverse fracture of the patella to guard against retraction of upper fragment by quadriceps femoris, by placing the patient in position, or have him sit up in bed, rubs and kneads the thigh from above downwards; if unsuccessful, uses chloroform. When the muscles are relaxed, he applies a bandage from the groin down to a safe distance from the joint, so as not to increase effusion nor tilting of the upper fragment. If a failure, leaves nature untrammelled in a sitting posture. Fixes the lower fragments with a pad of lint, retained by adhesive plaster. Gives no results. Regards ligamentous union as not producing, universally, difficulty of locomotion. Mentions a case of permanent separation of one and a half inches, and locomotion was perfect.

Gibson‡ speaks of the comparative weakness of fractured patella. Prone to refracture; the difficulty, perhaps impossibility, in transverse fractures to coaptate fragments; therefore no osseous union. Inter-substance resulting, remaining soft, is easily torn, for a length of time. Bony union extremely rare. Cites Sir A. Cooper's experiments. Warns of the danger of the fracture of sound patella from strain superinduced.

Miller§ avers that in transverse fractures of the patella bony union may occur, but undesirable, from danger of refracture or anchylosis; thinks a short inter-substance obviates difficulty. Treatment, ordinarily by position; bandages leg, and applies figure-of-eight if necessary; if not, suggests broad leather belts above and below the joint; by cross belts approximating, produces coaptation; or Lonsdale's apparatus, which consists of a posterior splint with foot-piece movable, to accommodate different limbs; in the region of the knee are two vertical bars of iron connected to the splint, each supporting horizontal arms bent at right angles, which slide on the vertical, being arrested by screws to which horse-shoe formed plates are attached by a hinge-joint. Being well padded, bandage the foot and leg to the splint, coapting the fragment; the upper horse-shoe with intervening soft pad is applied first, just above the fragment, not touching the patella; lower plate applied just below, secured by the screws; then bandage the thigh and upper part of the splint; whole limb placed in position by a pillow placed under it. Mode of Dr. Neill, of Philadelphia, is most convenient and

* Amer. Jour. of the Med. Sciences, vol. xli. 1861, p. 395.
† Ibid. vol. xlii. 1861, p. 575.
‡ British Med. Journal, vol. i. 1862, p. 543.
§ Med. Times and Gazette, vol. i. 1864, p. 86.
‖ System of Surgery, translated from German, J. F. South, 1845, vol. i. p. 576.

* Liston's Surgery, 1846, p. 91.
† Skey's Surgery, 1851, p. 167.
‡ Gibson's Surgery, vol. i. 1850, p. 271.
§ Miller's Surgery, Amer. Ed., 1857, p. 617.

efficient; viz. application of one or more strips of adhesive plaster above and below the fragments obliquely attached to the posterior splint; no strangulation of the limb, as in figure-of-eight bandaging.

Smith* affirms that crepitation is almost impossible, except in oblique fractures of the patella; bony union rare. Advises accurate adjustment of the fragments to obtain bony union; if not, a short inter-substance, for power. Has a specimen of bony union in his cabinet; history unknown. Treatment, viz. Dessault's: strip of muslin, two and a half inches wide, from groin to foot, retained by bandaging the lower extremity; cut two slits in the strip opposite the knee, to pass the fingers through, to coaptate the fragments, retaining them by compresses, with figure-of-eight bandages; then bandage thigh to overcome the muscles; place the limb on a well padded inclined plane splint, thereby favoring muscular relaxation, and return of blood, reducing inflammation. Boyer's: a compress is placed above the superior fragment; by figure-of-eight bandage brought down; coaptation is completed, by figure-of-eight bandage; the leg having been bandaged, bandage the thigh; apply a posterior splint as in Dessault's mode. Prof. Dorsey's is one of power: a well padded posterior splint, length of the extremity; two strips of bandage tacked on the back of the splint; sufficient separation, opposite the knee; the fragments being coapted, and by compresses above and below fragments; held by tying the strips obliquely over them. He believes this will hold the fragments in accurate apposition, but risk of inflammation and ulceration. He thinks Malgaigne's hooks would more thoroughly coapt fragments, but objects to them not only from danger of perforating the joint, but from erysipelas. His best treatment is the application of adhesive plaster, coaptating the fragments, combined with a posterior elevated splint; plaster should be three-quarters of an inch wide, long enough to pass obliquely around the limb; the lower fragment being fixed, apply first strip from behind the tibia, around lower tip of patella, upwards; upper fragment being coaptated, apply strips in an opposite direction, forming two semicircles about the joint; dressed occasionally as indicated; dressings continued five or six weeks; cautious passive motion commenced about the third week. He remarks, adhesive plaster had been employed for thirty years past in Pennsylvania Hospital, by Barton and others, satisfactorily. Attention was recalled to it by Neill, of Philadelphia. Gama, of the Val de Grace, Alcock, of England, and Hamilton, of New York, all approve of it; each has slightly modified it, still using the adhesive strips. Gerdy's plan, liable to cause pain; it is an invaginated bandage, with compresses above and below the fragments, retaining, by bandaging, the whole extremity.

Gross† never had seen complete ossific union of transverse fractures of the patella; speaks of the difficulty of muscular action on the upper fragment, to overcome which is the chief indication of treatment. Apparatus, than which he considers nothing better, is, viz. a well padded tin case applied posteriorly, from middle of thigh to same point of leg; bandage from toes upwards, and from groin downwards, upper fragment being reduced; is confined by adhesive strips, placed around the bone above and below the joint, and connected by vertical and transverse pieces; dressing completed by application of a long, thick, and rather narrow compress, extended around upper border of the patella, confined by two bandages around the joint, figure-of-eight; no danger of displacement. Gives a cut of the mode of Prof. Hamilton, with comment, that it is, with slight modifications, that of Pennsylvania Hospital. He commences passive motion about the third week, repeated every other day, subsequently every day; in four weeks removes the tin splint, applying a posterior leather splint; permits the patient to walk with crutches; guards against early extensive use of the limb under three or four months. Heath:* Treatment not to commence till inflammation is subdued; accomplished by position, having the patient sit up, with the extremity raised, etc.; apparatus, simple splint back of knee, with two strips of adhesive plaster to coapt fragments; or Wood's splint, which is a back splint, with hooks, as fixed points for the bandage to act from, *vide* Ferguson, p. 393, and Druitt, p. 285. Recommends broader splints than generally used, preventing pressure of sides of the knee; well to bandage thigh from groin to control quadriceps femoris. When danger is over to the joint, advises plaster of Paris and starch appliances, alone or with light back splint, for out-patients.

(*To be continued.*)

* Smith's, H. H., Surgery, 1868, vol. i. p. 634.
† Gross's Surgery, 1866, vol. i. p. 946.

Reports of Hospitals.

CHARITY HOSPITAL, BLACKWELL'S ISLAND, N. Y.

REPORT OF A CASE OF TRIPLE BIRTH.

REPORTED BY CHARLES CULVER, JUNIOR ASSISTANT RESIDENT PHYSICIAN.

DELIA O'BRIEN, a native of Ireland, thirty-five years of age, was admitted to this hospital, March 19, 1867. On Thursday, the sixteenth instant, she first noticed some slight pains during the forenoon, but did not call the attention of any one until about two o'clock, when she felt the waters escaping. She was immediately placed in bed, when a child presenting by the head was expelled before an examination for position could be made. The uterus still remaining large, a hard mass being felt at the fundus, auscultation was resorted to, the placental bruit was heard on the left, and a fœtal heart on the right side of the abdomen; an examination by the vagina revealed the presence of a bag of waters protruding from the os uteri, inside of which the feet of a child were distinctly felt; the rapid contractions of the uterus soon crowded this child down, and it passed rapidly through the well dilated passages, no part being arrested; one dram of the tr. ergot was now administered, which quickened the pains, that were growing less frequent.

The vertex of the third child was felt engaging at the superior strait in the first position, viz. occiput to the left acetabulum. This child, like the preceding, was quickly delivered. Firm pressure was made over the fundus uteri, and the placentæ were cast off; that of the first child being single, the other having a double placenta, to which two cords were attached—one near the edge, after the manner of a battledore placenta, the other cord was attached as usual—each child was inclosed in a separate cavity, and surrounded by membranes of its own. They were all perfectly formed female children, and their combined weight was eighteen pounds and twelve ounces. The entire delivery was accomplished in an hour and a half. The mother had previously had three children, all single births; one of them weighed twelve pounds at birth. She was not in the least exhausted, and declared her ability to walk about. She assures me that there is no hereditary tendency to multiple pregnancies, either in her own family or that of her husband.

* Christopher Heath's Manual of Minor Surgery, 1866, p. 188.

Original Lectures.

LECTURE ON CERTAIN MORBID AFFECTIONS OF THE FINGERS AND TOES.

By ALFRED C. POST, M.D.,

PROFESSOR OF SURGERY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NEW YORK.

GENTLEMEN:—There are certain diseases of the fingers and toes, to which I will now direct your attention. The first of these is in common language called a felon or whitlow. It is technically called paronychia, the term being derived from the Greek words παρα, beyond, and ονυξ, a nail. It is an acute inflammatory affection, involving primarily the synovial membrane which lines the sheath of the flexor tendon, and extending secondarily to the periosteum of the adjacent phalanx, and to the integument covering it. It may be the result of a puncture or contusion, or of exposure of the part to excessive heat or cold. It sometimes occurs without any obvious exciting cause. The first symptom is a circumscribed dull pain, referred to the palmar surface of one of the phalanges, and increased by pressure upon the affected part. This pain gradually increases in severity, until it amounts to almost intolerable agony. It assumes a distinctly pulsatory or throbbing character, and is greatly aggravated by a depending position. The severity of the pain is such as to incapacitate the patient for bodily or mental exertion during the day, and in a great measure to prevent him from sleeping at night. When the disease is left to itself, it continues to torment the patient by day and by night, during a period varying from one to two weeks, until the sloughing of the fibrous investments, and the ulceration of the integument, relieve the tension of the inflamed parts, and give issue to a collection of purulent matter resulting from the inflammatory action. At the commencement of a paronychia there is very little swelling, and as the disease advances, the swelling takes place very gradually, in consequence of the density of the tissues which are involved. The swelling is at first confined to the anterior surface of the affected phalanx, and then slowly spreads along the adjacent phalanges, both in a proximal and distal direction. It also secondarily involves the dorsal surface of the affected member, and at an advanced period the dorsal swelling sometimes exceeds that which exists on the palmar surface. Under these circumstances, it is a matter of great practical importance to avoid the error which I have known to have been committed—viz. that of regarding the dorsal inflammation as the main disease, and directing the principal treatment to its relief. Under such a mistaken view of the disease, and the consequent erroneous treatment, the sufferings of the patient are unnecessarily protracted, and the liability to disorganization and deformity is greatly increased. The swollen parts exhibit a blush of redness more or less deep, and the temperature of the surface is elevated considerably above the normal standard.

When a spontaneous opening has occurred, the intensity of the patient's sufferings is relieved, and he is able to sleep. But a considerable time elapses before the pain and swelling subside, and the tenderness on pressure ceases to annoy the patient. Before the part returns to a painless condition, it often happens that the flexor tendons have sloughed, and the patient has thus permanently lost the power of flexing the finger. The inflammation often extends to the periosteum and to the bone, giving rise to caries or necrosis, followed by permanent deformity of the affected member. In some cases, fortunately rare, the inflammation becomes diffuse, extending along the palm of the hand, and up the forearm and arm, sometimes rendering necessary the amputation of the limb. In one case, occurring in the practice of a professional friend, the patient's life was barely saved by amputation at the shoulder-joint.

Notwithstanding the severity of this disease, and the injurious consequences to which it leads, when left to itself, I have always found it amenable to treatment. At a very early period, before any considerable swelling has occurred, the disease may sometimes be arrested by the application of poultices or fomentations, at as high a temperature as the patient is able to endure. But the remedy on which the principal reliance is to be placed, is a free and deep incision extending into the sheath of the tendon. A superficial incision will afford little or no relief; and a puncture, extending into the synovial sheath, and giving exit to pus, will fail to afford the complete and immediate relief which is the result of a free incision. The object of the incision is not merely to give exit to pus, but to relieve the tension of the fibrous membranes which strangulate the inflamed parts, or which have themselves become involved in inflammatory action. The manner of making the incision is a matter of some practical importance. If an attempt be made to open a paronychia in the same manner in which an abscess is usually opened—viz. by inserting the point of a lancet or bistoury, and then cutting out towards the free surface of the skin, the opening will be very apt to be insufficient. The best method is to lay the back of the hand on a towel resting upon a table, and having the finger firmly held in an extended position, to cut boldly with a sharp scalpel from the surface into the synovial sheath, to the extent of half or three-quarters of an inch. If the patient is not under the influence of an anæsthetic, the incision occasions a severe but momentary pain, followed by a smarting or burning sensation, of variable duration, but not usually of great severity. The throbbing and aching pain of the disease is almost instantaneously relieved by the incision, when it is properly made. There may be some question as to the time when a paronychia should be laid open. Most patients prefer waiting until they have passed several sleepless nights, before they make up their minds to undergo the operation. My own opinion is in favor of making the incision at as early a period as the disease can be accurately diagnosticated. I do not wait for the occurrence of suppuration. If this can be anticipated, it will save the patient much suffering, and the wound will heal more promptly than if the incision had been made at a later period. When the incision has been made at an early period, before much swelling has taken place, the only dressing required will be a compress of lint wet with cold water, and wrapped around the finger. But when the incision has been made at a more advanced period of the disease, when there is great swelling, with copious suppuration, emollient poultices may be applied with advantage. But they should not be continued more than three or four days after the operation, as their protracted use produces too much relaxation, and retards the healing of the sore. When the poultices are laid aside, the sore may be dressed with lint spread with a moderately stimulating ointment, as ung. resin, etc. When necrosis or caries of the bone has taken place, the diseased or dead bone may be removed, or the finger may be amputated.

It is rare to meet with paronychia of the toes. The thumb and fingers are the usual seat of the disease.

The disease known as onychia is liable to occur in the toes as well as the fingers. It affects the great toes more frequently than the smaller ones, and I think that

I have observed it more frequently in the thumbs than in the fingers. The disease is an inflammation of the matrix of the nail, and of the adjacent portions of the skin. It is often occasioned by contusion of the distal extremities of the fingers or toes. Sometimes it occurs from constitutional causes. A very severe form of the disease occurs in connexion with constitutional syphilis. The disease known in common language as a "run-round" is a mild form of onychia. The more severe form of onychia is a very obstinate and painful disease, often continuing for years, and showing no tendency to amelioration except under the influence of appropriate treatment. The extremity of the affected finger or toe becomes greatly swollen, presenting a livid red color, with ulceration beneath the nail, and giving issue to an offensive sanious discharge. The nail itself becomes partially detached, presenting a broken and irregular outline, and having a dark color. In its abnormal condition, it acts as a foreign body, and its presence maintains a persistent irritation.

The first step in the treatment of this troublesome and obstinate disease is the evulsion of the diseased nail. The nail should first be divided longitudinally with a pair of strong scissors, and then each half should be separately seized and extracted with a pair of chiropodist's forceps. After the bleeding has ceased, the whole ulcerated surface should be lightly touched with nitric acid, after which cold water dressings should be applied. At intervals of forty-eight hours, the surface may be brushed over with nitrate of silver, or with the compound solution of bromine. The cold water dressings may be continued with advantage until the parts are restored to a sound condition, or a lotion may be employed of liquor sodæ chlorinat. diluted with eight parts of water. When a toe is the seat of the disease, the lower extremity should be kept in a horizontal position. Under the treatment which I have recommended the disease has generally been cured within a few weeks. When onychia has occurred from constitutional causes, appropriate internal remedies should be administered.

Onyxis, or inverted toe-nail, is a disease which affects almost exclusively the great toe. It presents the character of an inflamed ulcer, involving the dorsal integument of the toe, on one side of the nail, the angle formed by the junction of the side of the nail with its anterior extremity, being imbedded in the substance of the inflamed and ulcerated skin, and thus keeping up the irritation, and preventing the ulcer from healing. This painful and troublesome disease is occasioned partly by an original malformation of the nail, partly by wearing a shoe or boot too narrow for the foot, and partly by cutting the nail too short at its angle, so that it is overlapped by the integument. In order that the patient should enjoy any degree of comfort, and that a chance should be afforded for the cure of the disease, it is indispensable that the sole of the boot or shoe should be sufficiently wide to prevent any injurious lateral pressure. In cases where the disease is of short duration, and of moderate severity, relief may be afforded by lifting up the angle of the nail with the handle of a scalpel, and interposing a small piece of soft linen rag between the nail and the skin. Benefit will also be derived from cutting the free extremity of the nail, so as to present a concave line, the middle of the nail being cut shorter than the angles. The nail may also be soaked in warm water, and scraped with glass, so as to make it thin and flexible. When relief is not afforded by these means the surgeon may avail himself of the plan of treatment suggested by Dr. J. P. Batchelder, of this city. This plan consists in cutting a longitudinal groove in the nail at a short distance from its inverted edge, the groove extending nearly, but not quite, through the thickness of the nail, and then lifting up the edge of the nail, and interposing a linen rag between it and the skin. By this means a change in the direction of the nail is effected, sometimes leading to a radical cure.

In the most severe and obstinate cases of the disease, evulsion of the nail becomes necessary. The nail should first be scraped in the middle, and then divided longitudinally with scissors, after which the two lateral portions should be extracted with a chiropodist's forceps. The operation is sometimes performed by extracting only the lateral half of the nail, corresponding with the side on which the inversion existed. I am satisfied, from personal observation, that the relief afforded in this way is not as complete as when both lateral portions of the nail are extracted, and that the new nail which afterwards grows is not as perfect in shape. After removing the nail, the foot should be kept elevated, and cold water dressings constantly applied. As the new nail begins to grow, care should be taken to prevent its margin from being imbedded in the skin, and, as soon as practicable, the margin should be elevated, and a soft rag interposed between it and the integument.

Hyponychial or Subungual Exostosis.—This is a bony excrescence from the dorsal surface of the last phalanx of the toe, where it is covered by the nail. In the great majority of cases, it occurs on the great toe, but it is occasionally seen on one of the smaller toes. It is ordinarily a result of a contusion of the affected toe. The patient complains of pain beneath the toe-nail, and, when the part is examined, the nail is found to be abnormally prominent. The morbid growth is frequently situated so far forward that it elevates the free extremity of the nail, and gives it an abnormal direction. The pain is chiefly occasioned by the resistance which the dense structure of the nail opposes to the growth of the tumor. It constitutes a serious annoyance to the patient, and greatly interferes with his comfort in standing and walking. The indication of treatment is to remove the morbid growth in such a manner as to prevent its reproduction. The nail must first be divided longitudinally with scissors, and the lateral halves extracted with forceps. The bony tumor may then be removed with a chisel or gouge, care being taken to carry the excision below the normal level of the dorsal surface of the phalanx; or, a stratum of the phalanx, including the base of the tumor, may be removed by means of a metacarpal saw. The wound may then be left to granulate and cicatrize. During the healing process the limb should be kept in a horizontal or slightly elevated position.

Dr. Minot, in the *Boston Medical and Surgical Journal*, gives the following case. A child three years old sickened December 21st; an eruption, supposed to be that of measles, appeared on the 25th. The diagnosis at first was a little doubtful, owing to the eruption being complicated by urticaria for two days. After this time, it had a perfectly normal appearance, and was attended by catarrh and other general symptoms of measles. A companion, who saw him early in the disease, was attacked with measles exactly a fortnight afterwards. A sister of the first patient and a young lady visiting in the family also took the disease at intervals of a few weeks. On February 3d, after a few days' indisposition, the eruption reappeared on the first patient, and went through its course in the usual manner. The interval between the attacks was six weeks. Singularly enough, of the three who took the disease from this patient, two had had the disease before.

Progress of Medical Science.

Action of Chloroform on the System.—Most of those who have carefully studied the effects of chloroform when administered in vapor to animals are of opinion that the first effect of the anæsthetic is excitant, and that this is followed by a sedative effect. This, however, is not the conclusion of M. P. Bert, who has presented a memoir to the French Academy on the action of chloroform as an anæsthetic. From his experiments on dogs and other mammals, M. Bert concludes that the excitant action of chloroform is a false one, and that it does not depend on any systemic effect of the vapor. He asserts that the excitant action is due to the effect of the vapor on the mucous coverings of the eyes, nose, mouth, and glottis: the chloroform irritates these surfaces, and produces the movements generally observed, and usually attributed to the effect of the *absorbed* vapor. It proof of this, M. Bert cites the following experiment: "I opened the trachea of a dog, and inserted into it a small glass tube connected with an inhaling apparatus. Into the latter I put some pieces of wool steeped in chloroform. Anæsthesia soon took place, but the animal slept tranquilly, and there was no period of excitation."—*Lancet.*

Cysticercus Cellulosæ in the Anterior Chamber of the Eye.—Oct. 10, 1866, Mrs. A. G., 28, sought the advice of Prof. *Förster*, of Breslau, on account of her left eye. About fourteen days before, she discovered that objects seen by that eye, in direct vision, seemed as if covered by a veil or cloud; there had never been any pain or redness in the eye; her husband saw a whitish round spot on the lower portion of the cornea, hence she came to Dr. Förster. In the anterior chamber a vesicle is seen which is immediately recognised as a cysticercus cellulosæ; it is about two millimetres in diameter; of a grayish white color; very translucent, and is adherent to the lower portion of the iris by a very fine pedicle (stiel). This pedicle is so short as scarcely to deserve the name. It appears rather like a point of the vesicle which is adherent to the iris. On motion of the eye, the vesicle floats about somewhat, though hindered by its connexion with the iris. The iris is normal in color, and in its secretion. A weak solution of atropine dropped into the eye shows that there is no adherence of the iris to the capsule of the lens, and presses the vesicle near to the lower corneal cords. There are changes in the form of the vesicle, which occur somewhat spasmodically. It then loses its round contour, becomes irregularly polygonal, and seen by a magnifying glass, the vesicle seems to contract towards a central point. A milk-white, almost opaque spot, represents the position of the head and neck. The eye is free from pain; free from irritation and injection; the cornea is fully transparent, except in two extremely small points lying on the posterior corneal surface; the media are clear, direct vision is unimpaired, the visual field is a little cloudy below. The patient in other respects is well.

Oct. 13.—After the effect of the atropine had passed away, the extraction of the cysticercus was done by Prof. Förster. A cataract-knife was introduced into the anterior chamber through the cornea, passing the knife under the vesicle. As the aqueous humor escaped, the peripheral portion of the iris bulged forward, and with gentle stroking of the cornea with a Daviel's spoon, from above downwards, the cysticercus ran out, having been loosened from its adherence to the iris without further instrumental aid. The prolapsed iris was cut off.

On the 9th day after the operation patient went home. The cysticercus lived for some time in tepid water, making distinct movements, but the head could not be caused to protrude by pressure. This is the first case of cysticercus in the anterior chamber which has been seen by Professor Förster among 30,000 eye cases observed by him.—*Dr. Krüger. Zehender's Journal*, V. Yahrgang; März und April, 1867.

The Enucleation of Nævus.—Mr. Thomas P. Teale, Jr., read a paper before the Royal Medical and Chirurgical Society on this subject. He advocated two principles which have received, as yet, little attention from surgical writers. The first is, that there exists in most cases of large nævus a distinct capsule which will enable the surgeon to enucleate the tumor without cutting wide of the disease, and thereby endangering large blood-vessels or nerves. Mr. Paget advanced this principle in *Holmes' Surgery*, vol. i., p. 498 (three cases are there adduced as proofs of it). The second principle is, that when a portion of skin covering a nævus is involved in the disease, it is not necessary to sacrifice such diseased skin, as it may be dissected off the tumor, and being retained as a cover to the wound, will gradually regain its natural appearance. This slow change is brought about by the gradual contraction of the internal cicatrix, by which the nævoid skin becomes united to the wound which it covers. It is an instance of the value of the designed production of atrophy by means of cicatrix.

Mr. Curling remarked on the general dread of using the knife in such cases, as there have been some deaths from hæmorrhage. Mr. Teale has adopted the procedure mentioned in the paper in some very formidable cases; but it was not suitable to all.

Mr. Prescott Hewett thought surgeons were too prone to early operation, as nævi will often disappear in time.

Mr. Birkett stated that in one case where there were twenty or more nævi, all were now gone.—*Medical Times and Gazette.*

The Value of Chloroform.—As we have given place recently to the opinions of Prof. Petrequin on the respective value of ether and chloroform to produce anæsthesia, it is but just that we do the same for the contrary views of Prof. Sedillot; the former represents the Medical School of Lyons, and the latter that of Strasbourg. Sedillot has, like many surgeons, given up long ago the use of ether for that of chloroform; for this his practical reasons are very likely stronger and more cohesive than his theoretical ones, which are few, but rather discordant. He literally says: 1st. Every time we have recourse to chloroform the question is of life or death. 2d. Chloroform is an art which requires an attention of every instant, and great skill and experience. 3d. Chloroform perfectly pure and properly applied never kills. But his remarks on certain points of application deserve better attention. When using chloroform, 1st. Let us avoid those deep inspirations as they are sometimes produced after a cough, or a momentary stop in the breathing process consequent upon laryngeal spasm—a single inspiration of the kind may be fatal. 2d. The apparent regularity of the respiratory movements is no proof that air penetrates into the chest. The glottis may be shut, and we must always ascertain the reality of the noise that is produced by the passing of the air through the glottis. 3rd. The cough shows the persistency of irritability of the nerves and muscles which could be allayed by continuing to use the anæsthetic agent. Vomitings are also proofs of commencing anæsthesia, and are stopped by renewed inhalations. 4th. It would be dangerous to try to completely paralyze the muscles in view of facilitating the reduction of luxations,

because their mobility is increased with greater energy as soon as extension is practised. In ophthalmic operations the same remark obtains. 5th. Paralysis of the tongue must be avoided because it falls on the larynx, rendering asphyxia imminent. 6th. Among the causes for suspending momentarily the inhalations, are: the quantity of chloroform inhaled, the coming of a period of excitement, mutism, insensibility to contact, reversion of the globe of the eye, incipient resolution of the limbs.

Practically acknowledging the difficulties which surround chloroformization, Dr. Sedillot advises the use of ether by inexperienced hands, and confesses that all the Strasbourg surgeons have recourse to the skill of Dr. Elser to produce anæsthesia in their surgical practice; Elser having operated for the learned faculty 14,000 times, meeting with no accident, and giving the greatest security to the operators who have recourse to his skill.

Thus Sedillot avoids the question of principle, and finds for his opinion the refuge of the extraordinary skill of Dr. Elser. Let us hope there will be, if possible, a few more Elsers, or a better and wide-spread knowledge of chloroformization.

Inoculability of Tubercle.—In the *Gazette Hebdomadaire* we have a continuation of N. Villeman's researches as to the inoculability of tubercle. In rabbits, he has again and again succeeded in reproducing it in this manner, not only when taken from the human subject, but still more rapidly when taken from the cow; further, the tubercular matter thus produced in one rabbit could be, in like manner, transmitted to another, in the same way as syphilis.—*Medical Times and Gazette.—Richmond Medical Journal.*

Application of Collodion in Cholera (*L'Union Médicale*).—Dr. Drouet, of La Grand-Montrougue, maintains that the external application of collodion will arrest the premonitory diarrhœa, and afford an excellent means of restoring warmth in confirmed cholera. He uses a mixture of collodion 6 parts, castor oil 1 part, smeared over the abdomen, and covered with cotton wool. The evaporation of the ether at first causes a sensation of cold, but in a few minutes this is followed by a feeling of warmth, which increases in intensity, without, however, becoming so intense as to cause distress. This application, he says, will certainly arrest the progress of the disease, if used during the first hours of the attack, and provided it be not of an extremely violent nature.—*N. Y. Medical Journal.*

A New Form of Suture.—Dr. Albert H. Hoy, of Racine, Wis., in speaking of the rubber suture, says: "We have repeatedly used a suture to which, not knowing of its being mentioned in any treatise on surgery, we desire to call the attention of the profession, trusting they will find that it meets the indications of a good suture, viz.: 1st, adaptation of the edges of the wound; 2d, producing little irritation; 3d, easily applied. In using it, the following things are required: 1st, a paper of ladies' sewing needles, the points of which, for one third their length, have been heated in a lamp and curved like a surgeon's needle; No. 4 is the best size; 2d, some rubber elastic bands, cut into inch lengths; that having a width of $\frac{1}{16}$ of an inch will be found most generally useful; 3d, a pair of small pliers and wire-cutters. To introduce the suture, one of the needles is taken firmly by the eye with the pliers, and a piece of the rubber band is strung on, near one of its ends, and the needle, thus armed, is thrust through the edges of the wound, thus holding them together. The free end of the rubber band is then strung over the point of the needle, care being taken to give the band just sufficient tension to hold the lips of the wound snugly together. The points of the needles are then snipped off with the cutters, and the suture is complete. The above suture is highly recommeded in harelip and other plastic operations, where speedy union of the cut surfaces is of the greatest importance."—*Chicago Journal.*

Ruptured Heart; Insufficiency of the Aortic Valve; Hypertrophy and Dilatation.—In the *Boston Medical and Surgical Journal*, Dr. Shattuck relates the following case. A man aged 50, previously in good health, after sleeping in a cold, damp room, awoke in the morning with pain in his chest, a frequent, loose cough with frothy expectorations, streaked with blood. These symptoms continued, with considerable dyspnœa and pain on taking a long breath. The first sound of the heart was loud and accentuated, followed by a short murmur. There were no râles; diminished resonance and bronchial inspiration and respiration in right supra-spinous fossa. Resonance marked over the front on each side of the chest, and loud respiration under both clavicles, and even in cardiac region. In the course of ten days there had been much improvement, but afterwards suffered greatly from asthmatic breathing; while sibilant and sonorous râles were heard all over the chest, but more distinct in front. Subsequently the dyspnœa became extreme; he had profuse sweats and sometimes delirium. The diastolic murmur became louder over the aortic than over the pulmonic valves. About two months after being attacked "he had an exceedingly severe paroxysm of dyspnœa, and while tossing about on the bed, suddenly sprang up, threw himself back, and after gasping for a moment, expired." An autopsy revealed the following: pleura of right lung universally adherent to costal pleura and the diaphragm. In left pleural cavity were found twenty-eight ounces of reddish, straw-colored serum, and the lining membrane of bronchial tubes of a deep red color. Left lung œdematous in upper lobe, and right lung somewhat œdematous. The pericardium contained three ounces of dark fluid blood. Several white patches seen on external surface of heart. Nearly over the septum between the ventricles, to the right of the coronary vein, on the anterior surface of the heart, and one inch and an eighth from the apex, is seen a rent, looking like an incised wound, running in a direction parallel with the septum. The rent gaped but slightly, was five lines long, and communicated freely with the cavity of the right ventricle. One of the aortic valves had its free edge contracted, and another was thickened by warty deposits. The mitral valve was healthy. The ascending aorta was dilated, and the upper two and a half inches of the thoracic aorta were much dilated, and the artery much thickened by atheromatous deposits.

Poisoning by Strychnine.—Dr. John Bartlett, formerly of Chicago, strongly recommends common salt as a curative of strychnine poisoning. He reports as many as twenty experiments on dogs, in which violent symptoms following large doses of strychnia ceased after emesis, induced by drenching the animals with water, holding in solution several handfuls of salt.—*Chicago Medical Journal.*

Hypodermic Injections.—They will be found invaluable in relieving pain and nervous irritability in all surgical accidents. It has also been found to prolong the anæsthesia from chloroform. I now inject one-quarter to one-half grain of morphine, when I expect my patient to be continued under chloroform for a length of time. The attention of the profession is respectfully called to this fact.—Wm. A. Greene, M.D., in the *Atlanta Medical and Surgical Journal.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & Co. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—TEPHENS Y CA

New York, July 1, 1867.

THE UTERINE ELEMENT IN PRACTICE.

THE advances which have been of late years made in the department of uterine pathology have not been without their effects upon general practice. The brilliant success which has associated itself with the labors of a few pioneers in this branch, has thrown open the lists to very many aspiring imitators, a class which has notably increased within the past few years. So great indeed has been this infusion of the uterine element into practice, that it is considered one of the necessary accomplishments of almost every general practitioner to make a vaginal examination of every female who falls into his hands, and discover as the inevitable result of such a procedure, some more or less important uterine disease. If any female is the possessor of any anomalous symptoms, if she escapes nowadays without a *careful* examination with the speculum, a few leeches to the os, a cauterization of the cervix, a pessary, a sponge tent, or a sea-tangle bougie, she is exceedingly fortunate.

To any one conversant with current medical literature, the fact is a very patent one that uterine diseases, if not on the increase, are certainly claimed to be very prevalent. This may be in a measure accounted for by the progress which has recently been made in the more thorough study of such affections, and the more satisfactory means at our command for arriving at a correct diagnosis; but we are compelled, from the circumstances of the case, to go a step further in assigning the reason for this so-called remarkable increase of uterine affections, and assume that the vast majority of them exist only in the imagination of the attending physician. Unfortunately for the cause of science, diseases of the uterus are as fashionable with physicians as with their nervous and hardly less senseless patients. Almost every third female invalid comes to the conclusion that she has that traditional, and as she thinks expressive complaint, "falling of the womb," and her family physician rarely fails to discover some slight enlargement of the cervix, a ring of congestion around the os, or a trifling amount of displacement! The usual routine treatment is instituted, the cervix is either melted down with potassa fusa or nitrate of silver, and then an interesting little contrivance in the shape of a pessary—an instrument, the oft-demonstrated exponent of ignorance and hobbyism—is applied, and the indications of the case are supposed to be met.

The testimony of all the experts in this branch is to the effect that the prevalence of uterine troubles is more than overestimated, and these assertions are based upon the fact, that very few of all the patients sent them have anything in the shape of uterine abnormality whatever. But as this statement only refers to those which are supposed to be desperate cases, what can be said concerning the trivial ones which are treated in the routine of a general family practice! Can there be much of error in the assertion that much is done for the large number of supposed sufferers which is not only utterly useless, but positively detrimental to the well-being of one of the most important organs in the economy?

It is perfectly natural for the uterine specialist to meet with any number of cases that are of comparative rarity, but hardly possible for every general practitioner to be equally favored; there is a certain law which governs the proportion of remarkable cases which cannot be ignored even by those who court uterine practice, while the plea of a correct diagnosis in every case, is in itself evidence of a transcendentalism, that is, to say the least, absurd.

Aside from the assumed prevalence of diseases of the uterus, there is an excuse for an extensive practice in this branch, in that it is so remunerative; and it is pretty generally understood that a gentleman skilled in introducing speculums and diagnosticating obscure womb diseases, has the strongest possible recommendations for business among that large class of would-be sufferers—the women. In this connexion we may remark that we recently heard it asserted by a gentleman long engaged in general practice, and who is supposed to be acquainted with all its requirements, that there were more fees collected for the treatment of diseases of the uterus, that were not fairly earned, than for those of any other organ or sets of organs in the body. No one acquainted with the merits of the case as he was could fail to come to the same conclusion.

It is legitimate enough, on general principles, to extend the circle of any one's practice, and if there is a demand for services to the uterus it must not be neglected any more than to the eye, the throat, the ear, the bladder, or the anus; but the significant question here obtrudes itself—Is the profession, by its treatment of these cases, doing its best, not only to lessen the suffering of uterine patients, but to persuade them at the same time that their ills are more imaginary than real? If the latter part of their duty is not conscientiously performed, the only excuse for indiscriminately cauterizing, incising, leeching, and "*supporting*" a comparatively inoffensive organ, is to be found in a disgraceful and therefore culpable ignorance of the fundamental doctrines of uterology.

This want of knowledge is the only would-be uterine pathologist's excuse, and its worthlessness is apparent, when he has within his grasp all the improvements which the labors of his more practical and scientific brethren have placed before him. He pretends to imitate them, when in reality he has become so poisoned with routine, that he is ten years behind the age. Even allowing a wide margin for all exaggeration as to the increased prevalence of the diseases, there is no reason why there will not be enough to claim the serious attention of every general practitioner; but in the name of science and humanity, let them be treated intelligently, let there be more exact knowledge and less empiricism, more brains and fewer instruments.

We have an announcement from an authoritative source, to the effect that it is the intention of the Medical Staff of Bellevue Hospital to issue a yearly volume of interesting cases occurring in that institution. This, if the project is carried out, will be the first instance within our knowledge in this country of collecting in an endurable form the valuable material of a large charity. The example of the faculty of that hospital deserves to be followed by other and older institutions throughout the country. There are not a few of these, among which may be prominently mentioned the New York Hospital, which has volumes of manuscript cases, and for the want of a suitable vehicle for their publication, they are hidden from all save those favored few who have access to the library. Many of the very interesting, not to say important cases, never have seen, or will see, the light, except some such means are taken to present them to the profession. Except for the occasional appearance of an isolated report of an operation or two by some members of the House Staff, or the occasional mentioning of a case to a society, the medical public would hardly be aware of the existence of the hospital. The same may be said of other similar institutions not very far off. It occurs to us that it would be feasible, in carrying out the plan of such a publication, to appoint clinical clerks whose duties should be to write up all the cases for publication, and submit the same to each interested party for revision, the corps being under the direction of a competent person, whose duty it should be to group and arrange them as would best suit the purposes of such a volume. For the faithful and acceptable performance of such duties a liberal salary should be allowed to all concerned, to stimulate industry and infuse a proper interest in the work. The material of Bellevue is ample, and there are plenty of men who would, for a consideration, be willing to perform the necessary labor; and if the project fails it will only be for the lack of a suitable appropriation to carry it out. The profession will undoubtedly gladly receive the volume, and the amount of pecuniary returns which the projectors will realize will be sufficiently ample to enable them to meet all their necessary liabilities.

Reviews.

INSANITY IN ITS MEDICO-LEGAL RELATIONS. Opinion relative to the Testamentary Capacity of the late James C. Johnston, of Chowan County, S. C. By W. A. HAMMOND, M.D., etc. New York: Baker, Voorhees & Co. 1866. 8vo., pp. 72.

THIS is an interesting, suggestive, and instructive pamphlet, treating upon several important points connected with moral insanity, the principal of which is that referring to the non-existence of any lucid interval in the monomaniac. Numerous interesting cases are cited by the author to prove his position, and the arguments which he offers are convincing. Every physician who may wish to prepare himself to testify in a court of law upon the question at issue, should read this little work, and profit by the facts which are presented in it. It is written in the usual elegant and attractive style of this well known and talented author.

DIE CHRONISCHEN KEHLKOPFES-KRANKHEITEN, mit specieller Rücksicht auf Laryngoskopische Diagnostik und locale Therapie, von DR. ADELBERT TOBOLD, Sanitätsrath und Docent der Berliner Universitat. (Chronic Diseases of the Larynx, with Special Reference to Laryngoscopic Diagnosis, by DR. ADELBERT TOBOLD, Lecturer in the University of Berlin.)

THERE are not a few who, having heard of laryngoscopy only as an interesting and beautiful wonder, suppose that at best it is merely a scientific plaything, which can have no very radical influence on the therapeutics of the affection that it aids us to diagnosticate. If we mistake not, this is the opinion, or at least the impression, of the great majority of the profession. It would be a great benefit, therefore, if either a translation of this work of Dr. Tobold, or some original work in our own tongue, could be introduced into general professional circulation.

The short period of a little more than eight years which has elapsed since the discovery of the laryngoscope has been marked by great activity in the literature of that subject, and yet until the recent appearance of this work of Dr. Tobold there was scarcely any treatise of much length devoted exclusively to chronic diseases of the throat. If we except a few brochures treating of some special affections, nearly all the treatises on this subject, excepting the very unsatisfactory work of Dr. Gibbs, are chiefly occupied with explanations of the use of the laryngoscope and the history of its discovery. Dr. Tobold assumes that his readers are familiar with the instruments employed, and after giving a few hints in regard to the possibility of always making a successful examination with them, he devotes the greater portion of the work to the pathology, ætiology, prognosis, and therapeutics of laryngeal diseases.

The chapters on new formations ought to convince the most sceptical that the discovery of the laryngoscope has introduced an era in medicine.

The author has very little faith in inhalations, at least for the portion of the mucous membrane that lies above the vocal cords. We think that in this particular Dr. Tobold does not sufficiently recognise the necessity, that is everywhere laid upon physicians, of consulting the feelings of their patients. Those who will not endure the sponging and injecting with strong solutions of nitrate of silver, alum, or sulphate of zinc, that he finds so efficacious, may be perfectly willing to inhale the same substances, and so put themselves in the way of cure, though the course of treatment may be more protracted than under the heroic system.

Certainly the use of medicated inhalations is now

advocated by higher authority than that of charlatans. The ideas advanced on the relation of laryngeal ulceration to tubercular deposits in the lungs should be thoroughly considered by every practitioner. If it be true, as the author asserts, that "laryngeal tuberculosis is exclusively a secondary product of lung tuberculosis," then the time has already come when no one should presume to be authority on diseases of the lungs who is not familiar with the use of the laryngoscope; for by as much as the evidence of the eye is more reliable than that of the ear in medical study, by so much must the inspection of the larynx be a more satisfactory aid in the diagnosis of certain stages of lung affections than the auscultation of the chest. Original and interesting as is this work of Dr. Tobold, we think that, had a detailed exhibition of a limited number of cases been added, its value would have been much increased.

Reports of Societies.

N. Y. PATHOLOGICAL SOCIETY.

STATED MEETING, MARCH 27, 1867.

DR. H. B. SANDS, President, in the Chair.

DR. ROGERS next made some allusion to the case of Fallopian pregnancy, presented by Dr. Finnell at the last meeting, more especially in connexion with the practicability of performing gastrotomy with the view of arresting the hæmorrhage. He had made it his business to inquire into all the circumstances of the case, and had been enabled to arrive at the conclusion, that, had the patient been seen, in the early part of her illness, by an intelligent practitioner, her life might have been saved. It may be remarked, in passing, that Dr. Finnell had no previous knowledge of the case before he was called upon to make the autopsy. Dr. Rogers ascertained that in addition to the symptoms which occurred ten days before death, the patient had been ill for some time, something like six weeks, during which period she had supposed herself pregnant. She had been unable to leave her bed for a period of three weeks. At that time she thought that she was about to abort, and was said to have had a sanguineous discharge one week before her pains came on. The remarkable circumstance was that she was ill enough to frighten her neighbors for a period of a whole week, and yet no physician was sent for. The pains in the afternoon of the first day subsided after a time, but subsequently it was noticed by her attendants, her daughter and a neighboring woman, that her belly became much enlarged, was very soft, and seemed, as they expressed it, to be filled with water. This was a very important symptom for any physician who might have seen the case. The other important point had reference to the situation of bleeding. The opening was a very small one, not larger than the diameter of a crow-quill. She was seen by a physician about two hours before she died, who pronounced her case one of colic.

In reference to the remark made by Dr. Finnell in regard to the chance of saving the woman by an operation, Dr. R. remarked, that the more he thought of the case the more he became convinced that her life might have been saved. If she had been seen the first day there could have been no danger of a wrong diagnosis.

CANCEROUS TESTIS.

DR. MARKOE presented a cancerous testis, and remarked upon it as follows:

I have a specimen which I merely present to the Society as a fact to which I hope hereafter to add a history; a fact, which is somewhat interesting from the rarity of its occurrence, and the pathological interest which attaches to the certainty and rapidity of the reproduction of this disease. A child, between two and three years of age, received some six months before I saw it an injury of the left testicle. The organ enlarged, gave a great deal of pain and distress for a certain time, and then subsided. From that time the testicle gradually increased in size, without a great deal of pain, or without any indication of inflammatory action, until the time at which it presented itself to me. At that time, now about two weeks ago, the testicle had attained the size of an orange; the scrotum was red; the swelling was somewhat pyriform, hanging very low as though dragging upon the cord; the cord was rather slender, and free from any contamination; one-half of the testicle was of a dark red, and the other was of a darker color and purple. The only question that could suggest itself at first was, that the mischief might have the character of an hæmatocele. I introduced an exploring needle, which was followed by the exudation of a serous fluid, and then by blood. I then determined to extirpate it, which I did immediately, and here it is. On examination the evidences were very satisfactory of its malignant character. Its gross appearance is very characteristic of soft cancer.

In conclusion he referred to a similar case operated upon by Dr. Parker, with a similar result.

DR. F. DELAFIELD, in reply to a question from Dr. Sands in regard to the microscopical character of the diseased mass, stated that it was composed, for the most part, of large round nucleated cells in well formed areolæ, many of the cells being in an advanced stage of fatty degeneration. There were almost no fusiform cells.

DR. SANDS stated that the reason why he asked the question was that, having had occasion to examine the testis removed by Dr. Parker, he had found it to be made up of the fusiform cells peculiar to the fibroplastic tumor. He had considerable difficulty in this examination, on account of the abundance of fatty degeneration present. He remarked that he had consulted Holmes's Surgery on the subject of tumors of the testicle, and had found mention made there of a similar specimen, which had been examined, and found to be fibro-recurrent, but the history of the tumor showed it to be malignant, that is it had a fatal termination by recurrence. Some surprise was expressed in the work referred to, that a tumor having these microscopical characters should have returned.

CYST OF OVARY:—OVARIOTOMY.

DR. J. B. CUTTER presented a specimen of single cyst of the left ovary, which he had removed by operation thirteen days before. The patient was an unmarried lady, twenty-three years of age. The disease had existed five and one-half years. She had been tapped in that time four times, about a year apart. The fluid at each time was albuminous and dark in color. The incision was made in the median line of the abdomen, midway between the umbilicus and pubes, and was four inches in length. There was one adhesion upon the right side of the tumor, which was to omentum. The extent of adhesion was about six inches, the vessels were very large and tortuous, some of them being equal in size to a lead pencil. It was decided, however, to tap the cyst, and remove it. There was another small attachment to the tumor, but its exact character it was not prudent to ascertain. This was tied with a stout silk ligature, and then a clamp was placed upon the omentum, which was divided so close that the cyst was cut into. The pedicle, which was a long, slim one, was next divided, and tied with a double silk ligature. The omentum

was next examined, when it was found that there was hæmorrhage below the point ligatured; the part was then secured again, and the mass beyond the ligature cut off. Each pedicle was included in the wound.

Ether and chloroform were first administered, but not acting well, ether alone was employed. She vomited slightly but once during the administration. After the patient was placed in bed, she complained of some soreness about the wound, and twenty-five drops of McMunn's elixir of opium were ordered. She never suffered from any pain from that time, and the abdomen remained perfectly flat. On the third day in the morning ten drops of McMunn's elixir were again administered with a view of keeping in check the peristaltic action of the bowels. On the tenth day the ligature from the omentum came away. There was suppuration at each pedicle. On the fourth day there was a slight fæcal discharge, and the Mc'Munn's elixir was substituted by tinct. of opium, and no movements took place until the eighth day, when a dose of oil was administered.

In answer to a question from Dr. Rogers, he stated that it was not considered at all dangerous to leave blood in reasonable quantity in the peritoneal cavity.

VESICO-INTESTINAL FISTULA.

Dr. Robert Watts, Jr., presented an interesting specimen of communication of the bladder with the intestinal canal. It was removed from a woman, who was an inmate of the Charity Hospital, on account of phthisis and syphilis. Soon after admission she was seized with diarrhœa, which continued until her death. On two or three occasions she had hæmorrhage from the bowels, but never to any great extent. Last November she, by mistake for Magendie's solution of morphine, took a grain of atropine. This was followed by the symptoms peculiar to poisoning by this alkaloid, viz. extreme dizziness, dryness of the fauces, and extreme dilatation of the pupil. She was treated immediately with an emetic of sulphate of zinc, and the stomach-pump. But although she recovered from the immediate effects of the poison, she had persistent vomiting, being only at times able to retain lime-water and milk, with which she was of necessity constantly fed. During the course of her sickness her urine was examined, and found to contain albumen and casts. There was nothing peculiar about her alvine dejections.

On making the post-mortem, the stomach was found perfectly healthy. The liver was fatty, and the lungs tuberculous. Both kidneys were found the seats of fatty degeneration.

The cavity of the pelvis gave evidences of old peritonitis, and all the organs were found bound together as the result. The rectum was pushed over to the right side, and returning on itself again had formed a large loop, the two ends of which were bound down closely to the bladder, and from each end there was a direct communication with the bladder. The left kidney had two ureters, which ran side by side, and opened at one point by separate orifices in the bladder. The patient had no bladder trouble, nor symptoms of peritonitis during her stay in the hospital. Death was occasioned simply by exhaustion.

The Society then adjourned.

Stated Meeting, April 10, 1867.

Dr. H. B. Sands, President, in the Chair.

FIBRO-PLASTIC TUMOR OF EYE-BALL.

Dr. F. Delafield exhibited a tumor of the eye, which he had removed on the 29th of March from a patient of the N. Y. Eye Infirmary. The patient was 45 years of age, of large frame, and apparently in the enjoyment of perfect health. About three years ago, he first noticed an impairment of the inner half of the field of vision of the right eye. This condition of things grew worse and worse, until finally he lost the sight of that eye altogether. There was at no time that he recollected any symptom of inflammation about the organ to account for the phenomenon, neither had he received any injury to the eye. On the 26th of December, he first presented himself for treatment at the Eye Infirmary; and at that time complained of pain in the eye-ball, and in the forehead over the eye. On examination of the affected organ, the pupil was dilated, the lens opaque, and only the external half of the retina, with two or three blood-vessels upon it, was visible. The conclusion arrived at was, that there was a tumor of the choroid or retina, lifting up the latter. Extirpation of the eye was accordingly advised; but the patient refused to have the operation performed. He was seen on two or three different occasions after this, and was found to be about the same, and then he was lost sight of until the 20th of March last. He then returned to the Infirmary with the story, that, for the previous fourteen days, the pain in the eye and forehead had very much increased—so much so, that he had not been able to obtain any rest day nor night. The pupil was then found still more dilated, the conjunctiva ecchymosed, the eye-ball exceedingly tense, and the retina in any part was no longer to be seen. Consenting to extirpation, the operation was soon after performed. On examination of the organ after removal, the posterior third of the eye was occupied by a tumor springing from the choroid, and detaching the retina, so that the latter was folded together and much atrophied. The mass consisted entirely of fusiform cells, with oval nuclei; and, what was somewhat remarkable for a choroidal tumor, there was no deposit in its substance of pigmentary matter.

SUPERNUMERARY FINGERS.

Dr. Post presented two supernumerary fingers, one from the right and the other from the left hand of a little patient three months old. One of these was possessed of a rudimentary nail. The interest of the case centred in the proof of a remarkable hereditary freak. The mother had a scar upon one of her hands, marking the situation of an amputation of the same finger upon the same side, and had given birth to eight previous children without any blemish; and what seemed more curious was, that her supernumerary finger had a rudimentary nail upon it precisely as the same finger removed from the same hand of her ninth issue.

In answer to a question from Dr. Rogers, he remarked that, in his opinion, this was an illustration of hereditary transmission, which had allowed of a long interval of time to show itself.

RAPID EXFOLIATION OF BONE.—NON-FORMATION OF INVOLUCRUM.

He next exhibited a rather unusual instance of necrosis of the fibula, which he had removed by operation from a boy ten years of age. On New Year's day the patient went out skating. His skate on the affected leg was strapped unusually tight, and interfered with the circulation of the limb, which became very much chilled. On his return home, he experienced considerable pain in the leg, attended with fever and headache: inflammation followed, which was regarded as erysipelatous in character, and was accompanied with much swelling. During the first four days, in addition to the other symptoms, there was pretty active delirium. About February 1st, after leeches had been applied, there was

discharge of matter through one of the bites, and subsequently some scales of bone made their exit. The child was presented to Dr. Post for the first time on the 9th instant. On examination, he discovered two sinuses, one of which was situated an inch above the ankle-joint, and the other about two inches higher. There was no appearance of inflammation above this latter point. The probe introduced, discovered bare bone; and, after enlarging the lower opening, almost the entire fibula was withdrawn with little difficulty. The necrotic tissue was very dense and heavy, and there seemed to have been very little if any tendency to the formation of an involucrum. He regarded the specimen as interesting in relation to the short interval of time which elapsed between the commencement of the attack and the ultimate exfoliation of the bone. Both articular extremities of the fibula were left intact, and were not involved in the diseased action.

Dr. Rogers thought that it was very remarkable that the articular extremities should escape under such circumstances.

Dr Krackowizer, on the contrary, stated that it was no uncommon thing to have the disease in growing persons arrested at those points. In fact, it was the rule rather than the exception. The true point of interest was in the exfoliation of so large a portion of the fibula under any circumstances, as the death of that bone was almost always partial and confined to mere shells, even where the tibia at the same time was almost entirely destroyed.

Dr. Sands asked if the periosteum was removed with the dead bone, and was answered in the negative.

Dr. Rogers did not think that there would be likely to be a regeneration of the bone, as there was at the time of the operation no disposition to the formation of an involucrum.

Dr. Post was of the opinion that there had been no time for the proper formation of the involucrum, and that eventually new bone would be produced to occupy the place now left vacant.

Dr. Sands alluded to a specimen of necrosis of the tibia, which he had presented on behalf of a surgeon of Halifax In that instance, the operation was of necessity performed so near the initiation of the disease, that the periosteum was found so firmly attached to portions of the dead bone, that it was removed with it. After the operation, there was such a feeble attempt at reproduction of bone, that the limb was finally declared useless, and was subsequently removed. In that case, the time which elapsed between the receipt of the injury and operation was much longer than in Dr. Post's patient. There was, of course, no attempt at the formation of involucrum; still, he believed that, could the periosteum have been left, new bone would in time have taken the place of the osseous tissue removed. He was inclined to concur with Dr. Post that, in the case presented by that gentleman, the prognosis was good for the ultimate regeneration of the fibula.

DOUBLE SCIRRHUS OF MAMMÆ.

Dr. Post next presented two specimens of scirrhus of the breast. One of the specimens removed from a patient, sixty years of age, was remarkable for its situation, it being confined to the inner side of the organ, near its sternal margin. The other specimen, taken from a female, forty years of age, showed a dissemination of the disease throughout the whole breast, and presented some peculiar microscopical characters, which are thus described by Dr. Lewis, the gentleman who examined the mass.

Both tumors are specimens of scirrhous cancer—that one which lay near the median line being specially interesting; first, because it lay at the inner margin of the mamma, the portion least frequently invaded by carcinoma; and, secondly, because, while to the naked eye its boundary appears very well marked, under the microscope it was clearly very indefinite, the signs of cancerous infiltration being only less manifest beyond than within the apparent boundary; that is, the stroma consists of the nominal fibro-cellular tissue of the part, changed in the centre of the tumor by the substitution of elongated fibroid, nucleated cells for the fibrous columns, having the interspaces densely filled with various cell elements; so that, in this portion of the tumor, the outline of the individual cells could not be distinguished, only a vast number of nuclei, with bands of fibroid cells running in various directions; but beyond the apparent limit these nuclei were fewer in number, and became less and less numerous, until scarcely a cell was to be seen in the areolar spaces.

The cancer-cells, as seen in the "cancer juice" and the marginal portions of the growth, were spindle-shaped, oval, pyriform, large, and small, and some of the former possessed two or three nuclei.

This tumor was hardest at its central portion; the second was fully as hard and dense near the surface at and in its centre.

Upon pressing this second mamma a thick milky fluid escaped from the nipple, which was also found upon making a deep section through the diseased mass. Under the microscope this was found to consist of multitudes of oil globules, measuring from $\frac{1}{6000}$ to $\frac{1}{2000}$ of an inch, and of larger corpuscles, which may have been colostrum corpuscles, or the exudation corpuscles (granule corpus. of Virchow), measuring from $\frac{1}{1000}$ to $\frac{1}{250}$ of an inch.

The fluid scraped from the cut surface of this specimen contained various forms of cells, long nucleated fibroid cells, small, oval, or irregularly shaped, and spindle-shaped cells. Some of the larger of the ovoid or irregularly-formed, contained several nuclei.

The stroma of this tumor was not investigated.

HAIR-PIN IN BLADDER OF A FEMALE.

Dr. Weir exhibited a specimen of calcareous deposit upon a hair-pin. The body was introduced into the bladder of a single female, æt. 28, as she says by accident, but probably either by design or *mistake*. It remained there until the first of February, she having entered St. Luke's Hospital at that time for the purpose of treatment. Before being sounded, in one of her frequent acts of micturition she experienced more than her usual amount of pain and inconvenience, and in the course of eight hours afterwards, the hair-pin passed with the bent end forwards, she completing the removal with her fingers. The incrustation was almost entirely confined to the middle portions of the arms of the pin, the looped extremity and the free ends being free. The weight of the deposit was 29 grains.

Some discussion took place in regard to the reason for the peculiar situation of the deposit upon the pin, but nothing satisfactory was arrived at.

[Might it not be possible that the pin had previously been legitimately used in the hair, thus becoming eroded in the middle portion of its arms, and this roughened surface afterwards inviting the deposit of calcareous matter when the instrument found its way into the bladder ?]

OVARIAN CYST:—OVARIOTOMY.

Dr. Cutter next presented a specimen of ovarian cyst, removed by ovariotomy from a patient two days before. She was 60 years of age, and first discovered the tumor 18 years ago. The tumor grew very slowly for the first dozen years, but subsequently increased in

size with great rapidity, interfering with the circulation of the lower extremities. Two or three years ago she had been tapped, and 30 or 40 pounds removed, and nine months after, the same operation was repeated, and about the same quantity of fluid evacuated, but of thinner consistency. In the course of six months after, was tapped twice more, each successive time the fluid being thinner than before. In consequence of exhaustion and troublesome obstruction to the circulation, she clamored for an operation, and her request was acceded to. An incision, three or four inches in length, was made in the median line of the abdomen, and a few trivial adhesions having been discovered, the wound was afterwards enlarged. The adhesions were then broken up with the hand, and the contents of the sac evacuated. In attempting to remove the sac there were found three or four adhesions to the omentum, at different points, and one to the vermiform appendix, about its middle; this latter was tied. The pedicle was as broad as the two hands, and occupied nearly the whole of the right broad ligament. It was tied in halves, by double silk ligatures, and no hæmorrhage whatever followed. The patient was doing well up to the time of reporting the case. In making the second cut into the abdominal wall, the scissors was used instead of the knife, and there was noticed a marked difference in the amount of hæmorrhage, the latter instrument seeming to be the preferable one.

Dr. Howard stated that he had seen five cases operated upon by Baker Brown, in which the pedicle was severed by actual cautery. In none of these was there any subsequent hæmorrhage, notwithstanding that in one the pedicle was quite broad.

Dr. Cutter remarked that it was the general belief that cases operated upon in that manner were ordinarily followed by secondary hæmorrhage.

THE PATHOLOGY OF "HOUSE-MAIDS' KNEE."

Dr. Markoe presented an enlarged bursa, removed from the right knee-joint of a middle-aged woman. It had been gradually increasing in size for a period of four or five years, and no cause was assigned for its appearance. The walls of the sac were remarkably thick, but the evidences of the existence of a fluid in its interior were sufficiently strong to make the diagnosis easy. The operation for its removal promised to be equally easy and simple. On cutting down upon the mass it was observed that there was no line of demarcation, and its removal was only accomplished by a rather tedious dissection through a very close and firm fibro-cellular tissue. At one point it was impossible to separate the tumor from the external layers of the aponeurosis of the leg, and the operation was only completed by cutting through a broad portion of this fascia. He remarked that Errichson had alluded to this incorporation of the walls of the sac with the aponeurosis referred to, and thought it was a fact to be borne in mind by younger surgeons who may be called upon to extirpate such growths.

The inner wall of the tumor had a flocculent mass attached to it, while the contents of the sac were very thick and semi-gelatinous in appearance. In connexion with the specimen it became an interesting question as to what was the origin of these tumors—were they natural, in the first instance, or acquired? He was inclined to the belief that no bursa existed over the ligamentum patellæ or patella itself, in the natural condition of the parts, as it was not found in young subjects and in many adults. In confirmation of this latter statement he remarked, that Prof. Watts had given attention to this very matter some years ago, and had looked over all the subjects in the dissecting-room for one season, and had not succeeded in finding a single one of the bursæ.

Dr. Post said that he had occasion to remove three cysts in that situation. In all there was considerable difficulty attending their enucleation.

In answer to a question from Dr. Sands, Dr. Markoe stated that the bursæ were most prominent over the tubercle of the tibia.

Dr. Post, as an argument in favor of the original existence of a bursa in that locality, stated, that he had met with an acute abscess completely confined to those limits.

Dr. Finnell presented a large pendulous cutaneous tumor, removed from the inner aspect of the arm of an old lady who had carried it for ten years. It was removed by simply severing a pedicle three inches long and an inch thick.

Dr. Allin, as one of the committee appointed to report upon the enlarged spleen presented by him at the previous meeting, stated that the organ was found, on microscopical examination, the seat of simple hypertrophy.

The Society then went into executive session.

AMERICAN OPHTHALMOLOGICAL SOCIETY.

Fourth Annual Meeting.

The Society met at the Cataract House, Niagara Falls, Tuesday, June 11, 1867, at 12 M. In the absence of the President, Dr. Edward Delafield, of New York, the Vice-President, Dr. Henry W. Williams of Boston, called the meeting to order, and made a few congratulatory remarks, in the course of which he stated that it was believed that the Society had done good, in increasing the respect felt for special labors in the field of Medicine. The following members were found to be present:

Boston.—Drs. Henry W. Williams, Haskett Derby, B. Joy Jeffries; *New York.*—C. R. Agnew, H. D. Noyes, H. Althof, D. B. St. John Roosa; *Albany.*—C. A. Robertson; *Rochester.*—C. E. Rider; *Philadelphia.*—T. G. Morton, E. Dyer; *Baltimore.*—E. Loring; *Chicago.*—J. S. Hildreth, E. Holmes; *St. Louis.*—John Green; *Cincinnati.*—E. Williams; *Detroit.*—J. F. Noyes.

Various committees, on nominations, reception of papers, &c., were then appointed by the President.

Dr. G. A. Hay, of Boston, was appointed the Committee on the Progress of Ophthalmology, for the ensuing year.

On the suggestion of the Secretary, Dr. Rider was elected Reporter, whose duty it should be to report the remarks on papers and cases.

THE PROGRESS OF OPHTHALMOLOGY.

Dr. B. Joy Jeffries then read the report on the Progress of Ophthalmology. The committee deprecated the publication of compilations, handy-books or books of ophthalmology, which become the guide of the practitioner in the particular place where published, and which after all were quasi advertisements. We should rather encourage the publication of Monographs, on topics in ophthalmology. In 1865 one hundred and thirty-seven books were published in our department; in 1866, two hundred and twenty-four. There has been some recognition by Medical schools that ophthalmology should form a part of the curriculum. The necessity of going to Europe for instruction in Eye diseases had turned the attention of the profession and the

laity to the Medical schools abroad and to the necessity for every medical man of a knowledge of French and German. The new operations for cataract were only alluded to since this disease was the subject for discussion. France had now three great text books of ophthalmology, viz. Wecker, Farro, and a translation of MacKenzie. We had none in English. The Ophthalmic Bibliography, from *Zehender's* Journal, was appended to the report, as well as a list of the Eye Hospitals and Infirmaries of the world, compiled from Dr. Knapp's brochure, to which additions had been made by Dr. Jeffries. The report of the committee was accepted with the thanks of the Society, and referred to the Publication Committee.

DELEGATES TO INTERNATIONAL OPHTHALMOLOGICAL CONGRESS.

Dr. F. J. BUMSTEAD, of New York, and Dr. W. W. Seely, of Cincinnati, members of the Society, were appointed delegates to the Congress of Ophthalmologists in Paris.

Dr. J. GREEN then read a paper entitled "Visual Tests, with special reference to the detection of Astigmatism, with an analysis of forty-one cases of Ametropia."

This interesting and valuable paper was an amplification of an article by Dr. Green, in the American Journal of the Medical Sciences for January, 1867.

The Society then took a recess till half-past four o'clock P.M.

AFTERNOON SESSION.

ENUCLEATION OF GLOBE FOR SYMPATHETIC OPHTHALMIA.

The Society came to order, and Dr. J. F. Noyes read a report of a case of "Enucleation of the Globe for Sympathetic Ophthalmia." Osseous degeneratio nwas found in the interior of the eye.

Some remarks were made on the rarity of true bony degeneration, by Dr. Althof; the depositions were generally calcareous, although bony deposition did occur.

Dr. WILLIAMS, of Cincinnati, did not enucleate the globe in sympathetic ophthalmia, but performed abscission, except when bony or malignant growths have occurred or a large foreign body was in the eye.

A rule was adopted restricting remarks on papers to three minutes to each member.

ENCEPHALOID DISEASE OF FUNDUS OF EYE.

Dr. T. G. MORTON read the report of the case of "Encephaliod disease, springing from the fundus of the eye, near the macula lutea, simulating glaucoma."

The patient was forty-one, eye was hard, lens completely cataractous, and there was severe pain. Patient said that blindness had come on suddenly, and iridectomy was done to relieve pain. It did not accomplish the desired result. Two weeks after the eye was enucleated, when pain was relieved. An encephaloid tumor, seemingly arising from the retina, was found two lines from the optic papilla. The pedicle of the tumor seemed to be attached to the choroid; there was no insertion in the sclerotica.

Dr. ALTHOF asked if relief to pain was to be expected from iridectomy in a case of glaucoma, advanced to total blindness, as in this case. Dr. Morton had seen it, and so had Drs. Agnew and Williams (Cin.). Dr. Morton stated in answer to a question, that nucleated and fusiform cells were found on microscopic examination of the tumor. He had accidentally omitted to bring the tumor with him.

TUMORS OF THE BRAIN CAUSING AMAUROSIS.

Dr. E. WILLIAMS then read a paper on "Tumors of the Brain, causing Amblyopia or Amaurosis."

This was a detailed account of several cases of brain disease, in two of which the presence of tumors had been diagnosticated by Dr. Williams, and the post-mortem verified the diagnosis. The other cases were supposed to be of the same nature.

In answer to Dr. Loring, Dr. WILLIAMS remarked that he thought the presence of the tumors might have been diagnosticated without the ophthalmoscope, although mistakes had been made in these very cases, where that aid was not employed. The ophthalmoscopic symptoms were swelling of the optic papilla, turgescence, and tortuosity of the vision, with no change in the arteries, they being straight.

Dr. NOYES made some remarks as to the necessity of thoroughly investigating the condition of the kidneys in neuro-retinitis, in order that we may make an accurate differential diagnosis between the effects on the brain and kidneys. The patient should be watched for a long time, and the *amount of urea* passed be noted.

Drs. W. A. Hall, of Philadelphia, and S. Pollak of St. Louis, whose names were presented by the Committee on new members, were elected members of the Society.

Recess.

SECOND DAY, JUNE 12.

Minutes of previous meetings read and approved.

OFFICERS FOR ENSUING YEAR.

The following named gentlemen were re-elected officers for the ensuing year:—

President.—Dr. EDWARD DELAFIELD, of New York.

Vice-President.—Dr. HENRY N. WILLIAMS, of Boston.

Recording Secretary and Treasurer.—Dr. HENRY D. NOYES, of New York.

Corresponding Secretary.—Dr. H. ALTHOF, of New York.

After some discussion as to a proposed amendment to the By-Laws, making the meetings every other year instead of yearly, the proposed amendment was rejected, and the Society voted, that when they adjourned, it be to meet in Newport, R. I., on the 3d Tuesday in July, 1868.

The following subject was adopted for discussion at the next meeting:—

"The Influence of the Internal Recti Muscles on Binocular Vision."

THE PRODUCTION OF ACUTE GLAUCOMA BY ATROPINE.

Dr. DERBY read a report of "Two cases in which the instillation of Atropine induced acute attacks of Glaucoma." Wharton Jones alludes to this, but Graefe does not. Dr. Derby only adduced the cases in order to provoke inquiry, as he did not at all think that these cases proved the injurious influence of atropine in cases of glaucoma.

Dr. ROOSA spoke of a case of glaucoma, in which Dr. Hinton operated, where the statement of the patient was very decided as to the occurrence of an exacerbation of the disease after the instillation of atropine.

Dr. WILLIAMS, of Cincinnati, never saw any deleterious influences from atropine thus used. He expected these acute attacks, with or without the use of atropine.

PROBES FOR THE LACHRYMAL PASSAGES.

Dr. AGNEW was here called to the chair, while Dr. Williams, of Boston, read a paper on "Modification of Probes for the Lachrymal Passages." Dr. Williams uses probes with bulbous extremities, made of alloyed silver.

Dr. WILLIAMS, of Cincinnati, used a large-sized probe,

when a small one would not enter; also used those made of tin in some cases.

Dr. JEFFRIES stated that Dr. Jeffries, Sr., has been in the habit for years of using probes like Bowman's, bent, having bulbous extremities, and he himself has often turned from the use of Bowman's to these.

Dr. DYER, spoke of further investigation on the subject of "Lenses fractured by hanging," and was allowed permission to present a complete report to the Publication Committee, the investigations and experiments being too recent to allow it to be furnished this time.

DR. JEFFRIES read a paper, entitled a "Ready method of permanently registering the field of vision," with a register for the same." The patient sits down with his head firmly supported, and the field of vision is mapped out in the usual way, cross lines of pack-thread being made over the board, so that the field can be measured.

The Dr. distributed copies of the register among the members.

STRABISMUS.

DR. H. D. NOYES read a paper on Strabismus, detailing some interesting cases. The principal object of the paper was to call attention to the necessity of taking great pains in securing the last of the three effects desired in the operation for Strabismus, viz: 1. The correction of the mechanical defect. 2. Correction of the error of refraction. 3. Securing Binocular vision.

He had lately performed the operation suggested by Liebreich, in which such free incision is made, *i. e.* parts freely dissected up, and afterwards a conjunctival suture inserted, and in a case where there was a convergent squint of seven lines, the final result was a deviation of one and a half lines. There was apparent parallelism for four days. One week after patient could direct both eyes upon the fingers at twelve inches distance. Dr. Noyes showed Javal's instrument for training the eyes to binocular vision, also a stereoscopic frame, contrived by himself, in which all the different kinds of glasses for the correction of Ametropia could be placed.

DR. HILDRETH read a paper on the "Cause of Anæsthesia of the cornea and radiating fibres of the iris, without intra-ocular tension."

DR. E. L. HOLMES read a report of ten cases of Sympathetic Ophthalmia.

DR. H. W. WILLIAMS, of Boston, began the subject of Cataract, by reading a paper on the use of sutures of the cornea after the extraction of cataract.

The Society then took a recess.

SECOND DAY.—AFTERNOON SESSION.

The discussion on cataract was carried on by Drs. Agnew, Noyes, Robertson, E. Williams, H. W. Williams, Morton, and Hildreth. The discussion turned principally on the method of performing the operation and on the after treatment. The flap operation was generally employed, and a bandage afterwards, but no pressure.

DR. NOYES had operated by Graefe's new method in seventeen cases. He advocated a larger incision than recommended by Graefe.

The Society adjourned at 4 P.M., to meet at Newport, R. I., on the third Tuesday of July, 1868.

NOVEL MODE OF SWINDLING A PHYSICIAN.—In a report of the Medical Association of Moselle, we are told of a case in which a woman refused to pay her doctor for more than one visit. She admitted in court that he had cured her of a severe illness; but she said she only sent for him once; if he came oftener, that was his own look-out. The judge took the same view of the case, and the doctor got for his action an order to pay the costs of it!—*British Medical Journal.*

Correspondence.

MEDICAL MATTERS IN PARIS.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—In Paris, the absence of the excitement afforded by political elections is amply compensated, for a limited circle of people at least, by the continually recurring elections at the Academy, and nominations at the *concours*. You are aware that all the hospitals in Paris are under the control of a central administration, who appoint all the physicians. The appointment is made by the decision of a jury, drawn by lot, from among the actual hospital physicians, who decide the merits of the various candidates for a vacancy, after submitting them to severe clinical examinations. A *concours* of this kind has just terminated, in a manner infinitely disappointing to fifty of the candidates who were rejected, and highly agreeable to the two who were deemed worthy for the important position. The successful candidates were MM. Olliver and Praust.

A new contest is now going on at the Academy, which is busy in deciding upon nominations to the chairs of surgery and medicine, left vacant by the death of Jobert and Rostan. Among the foremost candidates for the first position is M. Langier, who has recently added to his previous claims to distinction by an exceedingly interesting memoir upon cerebral concussion. The phenomena occasioned by this accident are analyzed with the greatest care, and referred to that part of the encephalon which, according to present physiological ideas, presides over the functions compromised. The cerebral hemispheres are certainly affected, for the intelligence, all voluntary and affective faculties, and the consciousness of all sorts of nervous irritation, are entirely suspended. *Unconscious* sensibility, on the contrary, and all movements resulting from reflex action, are, however, preserved, which proves that the pons arolii, and probably the corpora striata and thalami optici are in all their integrity. M. Langier discusses the question, why the hemispheres alone should suffer from a shock that must be transmitted to them through portions of the encephalon that remain uninjured. He accounts for this immunity on the part of the pons, the bulb, etc., by the fact of their superior firmness of structure, and the more secure position of their gray masses, which, being in the centre of the white tissue, are much less exposed to shock than the gray substance of the hemispheres distributed over their surface.

It is not certain whether this memoir will elect M. Langier, but it is discussed in his favor. Another illustration of the value of disease in dissecting apart the involved functions of the brain, is furnished us this week by a most interesting case at the Hôpital St. Antoine, in the service of M. Jaccaud. It was a case of aphasia, the disease that has been rendered so famous by M. Broca's theory, which attaches it to a lesion of the third anterior convolution of the *left* cerebral hemisphere. The accident is not uncommon, but the opportunity for verifying the diagnosis by an autopsy is comparatively rare, as the disease is rarely or never directly fatal. Hence this case, which afforded such an opportunity, is one specially valuable.

The patient in question was already a victim to Bright's disease of the kidney, for which he had been in the hospital since last June. At the period of the accident he suffered from an extensive œdema, without ascites; albumen was abundant in the urine; he presented, moreover, a systolic souffle at the point of the

heart. On the 22d of January, without any premonitory symptoms, this patient suddenly discovered that he had lost the power of speech, and on the morning visit, the next day, he was found in a state of great disquiet, pointing to his lips and tongue, indicating by signs that he wished to speak but could not. There was not the slightest lesion of any of the limbs, and at the face only a slight paralysis of the zygomatic and elevator muscles of the right side of the mouth, which was drawn a little to the left.

The understanding was not in the least impaired; he took up any article that was named to him, but could not name them himself. When a person pronounced before him a word distinctly articulated, he examined carefully the motion of the lips, and succeeded in uttering some monosyllable, as "bien," "vous," but that was all. He was equally unable to write as to speak, never getting beyond the first letters of his name.

In presence of these symptoms, and on account of the mitral insufficiency, M. Jaccaud pronounced a diagnosis of lesion of the third frontal convolution, probably at the left (since that is the case seven times out of ten), and probably in consequence of an embolus.

The aphasia began to disappear by the end of the 30th, and by the end of February was entirely gone. The patient died on the 22d of April, and at the autopsy the diagnosis was fully confirmed by the discovery of—first, complete fatty degeneration of the kidneys; second, vegetations on the mitral valve, and insufficiency; third, buried in the white substance of the third frontal convolution of the left hemisphere were two hæmorrhagic cysts, which contained some drops of liquid. One of these cysts was the size of a pea, and situated at the right of second, whose volume was three times as considerable. The surface of the section was distinct and well limited; not only the lesion did not extend beyond the convolution in question, but the gray matter of that was untouched, and from the exterior appeared perfectly healthy. The other parts of the encephalon, as also the membranes and the arteries, were examined with great care, and found perfectly sound.

Hence this case brings fresh support to the theory that places the power, not merely of speech, but also expression by writing, in this limited part of the brain.

Among the candidates for the vacant place in medicine at the Academy, M. Hérard is one of the most prominent. His claims to the honor chiefly rest upon a work that he has published this year upon pulmonary consumption. The initial idea of this striking book was originally promulgated in Germany by Reinhardt, but M. Hérard and his colleague, Cornil, have done much, not merely to popularize Reinhardt's views, but to bring to their support abundant clinical demonstration. You are aware that Reinhardt completely upsets the old descriptions given by Laennec and Louis of the cheesy tubercle. According to recent microscopical researches, the yellow masses thus denominated are formed, not by the ulterior development of a heterologous deposit, but of a pneumonia, excited by the presence of the crude tubercles in the connective tissue of the lung. This pneumonia differs from ordinary acute pneumonia, rather in its anatomic and microscopic characters, than in its constitutional effects. Instead of an exudation of fibrine into the alveoles, there is an exudation of pavement epithelium and leucocythes. In other words, it is a *catarrhal* pneumonia, similar with that caused by artificial experiment. To this pneumonia Hérard and Cornil refer all the general symptoms of phthisis, the fever, emaciation, and destruction of the vital forces. They maintain that the presence of the crude tubercle in the lung excites *no* general disorder, and it may remain latent for an indefinite period, until, generally in consequence of some special accident, the tissue surrounding it inflames. This inflammation may subside spontaneously or under the influence of treatment, but relighted again and again, it finishes by entering upon the cheesy stage (*pneumone caseuse*). At this stage the contents of the alveoles liquify, the hepatised lung softens, and the cavern is formed which for so long has been exclusively attributed to the softening of the tubercles. These also soften, but their size always remains the same as that of the original gray granulation. Even when softened they may be distinguished from the masses of pneumonic lung through which they are disseminated, by the presence of small nuclei and the cellules, called by Robin cytoplastians.

In consequence of this view of the anatomy of phthisis (which approaches in its nature somewhat to that proclaimed by Broussais), M. Hérard lays special stress upon local revulsives in the treatment, iodic frictions, blisters, and the actual cautery. The tonic and stimulant general treatment is of course also maintained, though our American use of alcohol is rejected. To a certain extent, a moderate use of tartar emetic, as recommended by Foussagrines, is counselled.

This treatment does not procure brilliant results in the hospitals, where the patients generally are too far advanced to be saved, but M. Hérard declares that a fair share of success may be obtained in private practice, where the disease is treated at the very beginning.

M. Marriothe communicates to the *Bulletin de Thérapeutique*, an account of some clinical experiments made by himself this winter with muriate of ammonia, in the treatment of catarrhal fevers that have been epidemic in Paris. These fevers assumed a remittent or intermittent type, without losing their distinctively catarrhal character, but proved quite obstinate to sulphate of quinine. In accordance with a suggestion by Schmidtmann, who was in the habit of giving muriate of ammonia in the declining period of gastric fevers when they assumed a periodical form. M. Marriothe tried the experiment, at first in some cases complicated with very severe neuralgies, which interrupted sleep, and even extorted cries from the patient. The effect of the muriate was surprising. In mild cases the febrile attacks and the neuralgies ceased upon the first or second day; in more severe forms the success was not complete till the third or fourth, but there was always amelioration by the first or second.

M. Marriothe thinks that the salt has an important influence in moderating the erethism of the mucous membranes, but that, besides, it acts directly on the nervous system, without the occurrence of any intermediate phenomena, as vomiting, sweating, diarrhœa, etc. The dose found necessary to arrest the febrile attacks and calm the neuralgia, varied from thirty to sixty grains in the course of the day, being administered in portions of 7–15 ʒ every three or four hours.

An operation that Dr. Brown has done much to bring into favorable notice in England, is beginning again to excite the attention of French physicians. I mean the capital operation of ovariotomy, upon which M. Boinet has just read an elaborate report before the Academy. The report begins with reference to an American, the first who practised ovariotomy with the definite intention of extirpating the diseased organs, Dr. Ephraim MacDowell, of Kentucky. This surgeon, between 1809 and 1830, operated thirteen times, and obtained eight cures. Baker Brown reports twenty-nine successful cases out of thirty-two operations. Even were the success in much smaller proportion than this (and the recent exposé of Brown's character renders us cautious about accepting his statistics), the oper-

ation would be legitimate in a disease that conducts its victims almost inevitably to the grave, the deaths being 95 in 100. M. Boinet reprobates the timidity of the French surgeons, who have so long recoiled before this operation, and proceeds to give many useful hints upon the precautions necessary to insure success.

In the first place, the operation should never be performed at a hospital, where peritonitis invariably follows the opening of the abdomen; a healthy, isolated locality should be selected, and a room prepared whose temperature should be maintained at 20 to 25 degrees centigrade. Secondly, the nature of the cyst must be carefully considered. If it be simple, unilocular, containing a liquid, clear, limpid, and serous, or even purulent or sanguinolent, the operation is inappropriate. Nelaton's system of iodine injections should be first tried. But if the liquid, though at first serous, becomes unctuous and fatty, ovariotomy is the only resource. Other proofs that the cyst is multilocular, or that it contains pathological productions contra-indicating the use of iodine, signs of the increase of the tumor, and exhaustion of the patient, are circumstances that should also call for the operation. Among the contra-indications should be reckoned the existence of grave complications, an early stage of the disease, pregnancy, or tumors in the uterine walls.

The operator should place himself at the right or left side of the patient, instead of between the knees, as recommended by some surgeons. The incision should be made on the median line, and of sufficient size to admit the free introduction of the hand in the cavity, for the purpose of recognising the size and position of the tumor and the extent of the adhesions, which exist three times out of four. When these adhesions are slight and can be easily torn, they occasion no inconvenience; but if large and resistant, their action frequently causes dangerous hæmorrhage. The dangers of too short an incision have been frequently exposed; the adhesions are not distinctly perceived, the cyst is imperfectly grasped, the other ovary cannot be seen, the pedicle is tied with difficulty, and sanguineous effusions may take place in the abdominal cavity without the knowledge of the surgeon. Should the first incision prove too short to avoid these inconveniences, a second can always be practised with safety.

The incisions should divide the different layers of the abdominal wall in succession, to avoid too sudden entrance into the cyst. As soon as this is discovered, the hand should be introduced, to ascertain the existence of adhesions or neighboring tumors. In the second case, it is only necessary to enlarge the incision; in the first, the adhesions must be detached by the hand, or destroyed by the scissors or hot iron. They should not be torn.

Before tapping the cyst two assistants should press upon the abdominal walls, in order to force the cyst to project between the lips of the incision. The puncture is then made with a trocar, and by means of the foregoing precaution the liquid is prevented from running into the peritoneal cavity. If there is more than one pouch, the first should be held by pincers, or tied, while the others are drawn out of the cavity. If the cyst, on its retreat, draws a portion of its adherent intestine, it is important that this be detached; if that be impossible, a piece of the cyst must be cut out, and left attached to the intestine. Care must be taken, however, to remove the internal secreting membrane from this fragment.

All bleeding vessels, whose volume is not too considerable, should be twisted, or cauterized with a hot iron or the perchloride. Only when this method is impossible should the vessels be tied.

The wound should not be closed until the last drop of liquid has ceased to flow. An eminently useful precaution consists in placing in the inferior angle of the wound, or in the recto-vaginal cul-de-sac, a caoutchouc tube, by which any liquid subsequently effused may drain off. MM. Keith and Koeherle attribute a great number of their successes to the observance of this precaution. Boinet has no dread of the introduction of air into the peritoneum, attributing all inflammation to the action of liquids, and not air.

A double line of sutures is necessary, one deep, the other superficial. M. Boinet decides in favor of including the peritoneum in the suture, to avoid the danger of this membrane contracting adhesions with the intestine. The pedicle should be compressed by a toothed clamp, which has the advantage of compressing the tissues and preventing hæmorrhages. If the pedicle is voluminous, it should, however, be tied, or the ligature combined with the clamp. When the size of the pedicle, or its insertion on the uterus, presents unusual difficulties, a thread of ligature should be passed around it before the cyst is cut away.

M. Boinet concludes, "that the ovariotomy should be accepted with as much enthusiasm as all other capital operations; and that now that the bases of diagnosis are better assured, and the operative procedures more perfect, the subsequent treatment better understood, more advantageous results will doubtless be obtained."

M. Demarquay, surgeon of a Maison de Santé, presents a report on the topical application of iodoform in the treatment of cancer of the uterus. This agent employed in the crystalline form, in a dose of 7 to 15 grains, is mixed with a sufficient quantity of butter of cocoa, and the suppository thus formed, introduced into the vagina, or an ulceration of the carcinoma, if that exists, —a tampon of cotton is placed in front. The general effects are slightly observable, although the iodine from the drug (C^2HI^3) is absorbed and may be discovered in the saliva and urine. But the local suffering is almost infallibly soothed; the swelling of the abdomen diminishes; and the ease procured lasts as long as the medicament is continued, is broken up by the interruption of its administration, and reëstablished when that is renewed.

Dr. Morel, the distinguished alienist, writes an interesting article in the Archives of Medicine for May, upon progression in hereditary insanity and nervous diseases. Not content with the vulgar fact of hereditary influence in the transmission of such disorders, he, in company with an army of modern *confrères*, seeks the laws that govern this hereditary transmission. I have not space left to enter into all the details of his curious paper, I can only mention three or four of the most striking conclusions, drawn from a great number of facts: 1st. Insanity, epilepsy, hysteria, chorea, eccentricities, dypsomania, etc., are only the branches of an identical constitutional vice of the nervous system, and may be transformed, the one into the other, by way of hereditary transmission. 2d. Such transformation is more frequent than the transmission of the same form of disorder. When a simple eccentricity of a parent becomes insanity in a child, &c., the hereditary taint is said to be progressive ascendant, and the opposite case progressive descendant. 3d. Whenever the several children of parents presenting a nervous taint, are *markedly dissimilar* in appearance and character, the taint will almost surely be transmitted, and progressive ascendant. It seems in this case as if the whole force of family likeness was concentrated in the depths of the nervous system. 4th. In such families it is common to observe that one or more of the members are gifted with remarkable intellectual ability, while others are idiots.

The third proposition especially constitutes the theme

of M. Morel's present paper. The fourth identifies his views with those of Dr. Moreau, who, in his remarkable work on morbid psychology, unhesitatingly ranks genius among the neuroses, and assigns to it an origin identical with that of epilepsy, insanity, and idiocy.

PARIS, June 18, 1867.

P. C. M.

CONGESTIVE FEVER IN THE SOUTH.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—In the reported proceedings of the Medical Society of the County of New York, April 1, 1867, it is stated that "the history of congestive fever was next discussed, especially as it appeared in the Valley of the Mississippi and on the borders of the Gulf of Mexico, where it was so prevalent and fatal. The conclusion was reached that prior to the year 1834, true congestive fever was unknown there. Not that it was unusual to find congestion complicating fevers and increasing their danger; but that the congestion which gave distinctive character to the fever, which first startled the people of that region in 1834, culminating in 1843, was attended with phenomena so exceptional as to demand a new name."

The impression which this statement is calculated to make upon the professional mind is, I think, erroneous. It certainly is a mistake to say that congestive fever in all its intensity and fatality was unknown in that quarter until 1834. When I went to that country in 1819 this form of fever was common, and it had been, as represented to me at that time, for many years before—even from the first settlement of the country. In some parts of Louisiana, and the southern portions of Alabama and Mississippi, congestion was such a distinctive characteristic of the prevailing fevers, that they were commonly designated by the term *Cold Plague*, and the mortality from this form of disease was greater before 1820, and even before 1830, than it has been since. But the same congestive characteristics have accompanied the graver forms of fever to the present time, and with as little variation of symptoms as has attended upon small-pox during the same period in New York city, or elsewhere. In some years it is more violent and fatal than in others, but people die of it every year from Memphis to the Gulf. As stated in my published lectures on the subject, "my belief is, the character of the disease has undergone little change since the time of Hippocrates. Names alone have changed;" and in the South we have been treated with many of these changes, not by any means beginning at so late a period as 1834.

As congestive fever is the great outlet of human life in the South, and the form of disease eminently to be feared by immigrants, it may be of importance, whatever may be said of its pathology and therapeutics, that its "*history*" be correctly written.

Truly yours,

A. P. MERRILL, M.D.

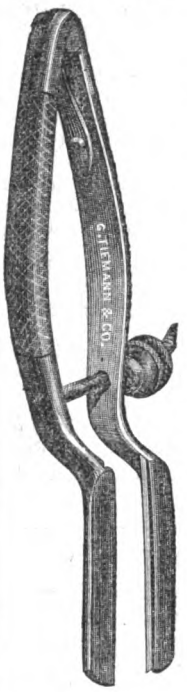
New York, June 20, 1867.

POISONOUS BREAD.—M. Nickles, Professor of Chemistry at Nancy, has just discovered a circumstance which may turn out to be of great importance to public health. It seems that bakers have been lately in the habit of heating their ovens with old painted wood got cheap from the demolition of houses. But bread baked in such an oven acquires poisonous qualities from the white lead, verdigris, and other noxious substances contained in the paint; and M. Nickles shows that these substances are absorbed by the crust, and do not penetrate to the crumb.

New Instruments.

THE MODIFICATION OF SMITH'S PILE CLAMP.

THE accompanying wood-cut represents a very useful modification of the Clamp of Mr. Henry Smith, of London. The original was arranged so that the blades closed like those of a scissors, and when the hæmorrhoid was grasped it necessarily became more or less pinched at one point, while it was comparatively free at the other. This objection to its use, when the sufferer was not under the influence of chloroform, was a serious one, causing much unnecessary pain, and even when the patient was insensible to pain the pile was not uniformly compressed. Mr. Stohlmann, of the firm of Tiemann & Co., of this city, appreciating the difficulties in the way, contrived a modification, by which, as will be seen, the two blades come together perfectly parallel to each other, and by means of the screw in the handle, are made to close evenly upon the mass to be separated. The hæmorrhoidal mass, being tightly inclosed, may be simply strangulated, and afterwards separated with the knife, and a hot iron applied to the surface; or this latter may be done, if the tissue is not too dense, without the knife. If the knife alone is used hæmorrhage may be prevented by applying persulphate of iron in powder or solution, to the severed part before the clamp is removed. The surfaces of the blades which are applied to the integument of the patient, are guarded with ivory plates, in order that no heat be communicated to the sensitive parts when the hot iron is used.



Obituary.

BENJAMIN OGDEN, M.D., who was long and favorably known as one of the earliest psychologists of this country, expired at College Point, L. I., on Tuesday, June 18, aged 70 years. He had for some months been a sufferer from paralysis, but a mitigation of his symptoms at one time seemed to indicate an ultimate recovery, and as it was, his death occurred somewhat suddenly. At the last session of New York Academy, after several eulogies upon the deceased, the following resolutions were unanimously adopted:

Resolved—That the Academy hears to-night with heartfelt sorrow of the death of one of its original founders, Doctor Benjamin Ogden, who died yesterday, June 18.

Resolved—That in Doctor Ogden we recognize one who has adorned and beautified his profession by nearly half a century of usefulness in this the city of his birth; nor was the knowledge of his worth confined to its narrow limits, for the brightness and goodness of his character, and his reputation and his speciality as an alienist, were co-extensive with our country.

Resolved—That he who was so foremost in every good word and work deserves our warmest esteem, and should excite and stimulate our earnest emulation.

Resolved—That the Academy will attend the funeral of Doctor Ogden, which will take place from St. James Lutheran Church, in 15th Street, between 3d and 2d Avenues, on Thursday (to-morrow), at 2 P.M.

S. Pomeroy White, M.D., died June 6th, 1867, of typhus fever, in the 66th year of his age. The New York Academy of Medicine, in memory of the deceased, passed the following:

Resolved—That the New York Academy of Medicine learned with profound regret of the death of one of its first, its oldest, and most esteemed fellows, Doctor S. Pomeroy White, who died on the 6th day of June instant, of typhus fever.

Resolved—That the Academy bears testimony to the lustre which in early life Doctor White shed upon American surgery; as well as to a long life in our midst of useful and honorable professional career.

Resolved—That the profession has lost a valued and useful member, the community an honorable and upright man, his family a fond and devoted head; and we desire to express our sympathies in this their bereavement.

Resolved—That a copy of these resolutions, signed by the President and Secretary, be furnished to the family of the deceased.

Died on Sunday evening, June 16, at the house of Dr. E. R. Squibb, in Brooklyn, Robert O. Abbott, Brevet-Colonel and Surgeon, United States Army, aged 43 years.

New Publications.

Books and Pamphlets received.

Ununited Fracture, with Remarks on the Operation. By H. J. Bigelow, M.D., Professor of Surgery Harvard University, etc.

Circular No. 5; War Department, Surgeon General's Office—Report on Epidemic Cholera.

Euchen on Nervous Injuries. Philadelphia. H. C. Lea. 1867.

The Mineral Waters of United States and Canada. By J. J. Noorman, M.D., of Roanoke College, Virginia. Baltimore. Kelly & Piet. 1867.

The Cholera as it Appeared in Nashville in 1849–'50 and 66 by R. K. Bowling, M.D.

Report New York City Lunatic Asylum.

Physiology of the Heart. By Claude Bernard. Translated by J. S. Morel. Savannah, Georgia.

Medical News and Items.

The New Hospital on Ward's Island—Adopting the suggestion of Mr. Richard O'Gorman, the Commissioners of Emigration have resolved to give the new Hospital on Ward's Island the name of their President, Mr. Gulian C. Verplanck.

The State Medical Society of Iowa held its last meeting May 22, 1867, at Davenport. The attendance was large, and many interesting papers were read by different members. The following officers were elected for the ensuing year: President—Dr. William Watson, of Dubuque. Vice-President—Dr. Edward Whinery, of Fort Madison. Recording Secretary—Dr. A. G. Field, of Des Moines. Treasurer—Dr. M. B. Cochran, of Davenport. Corresponding Secretary—Dr. E. J. B. Statler, of Marshalltown.

Homœopathy on the Eye.—The Directors of the New York Ophthalmic Hospital, having substituted homœopathy for the allopathic system of cure, have employed Drs. Allen, Bacon, Wetmore, and Leopold. The retiring physicians are Drs. William F. Holcombe, Giovanni Ceccarini, J. M. Carnochan, and Marcus P. Stephenson.

Condition of Poor-Houses of New Jersey.—In the report of the State Sanitary Commission to the Governor of New Jersey, for the year 1866, we find the following allusion to the condition of the poor-houses:

"In connection with our attempted investigations as to the insane and idiotic in county and township poor-houses, we instituted some inquiries in reference to these institutions, and it has become quite apparent to us that in parts of our State 'the poor system' is essentially defective; while in some parts the poor are farmed out to the lowest bidder, in others they are congregated together without sufficient regard to the use of those means which prevent pauperism as well as provide for it. On the other hand, we are not without models in our own State, which other towns and townships might imitate, and our error is in having no public officer whose duty it is to regard these and other interests of public hygiene and to bring them to the attention of those who are themselves conscious of defects, but for the want of such correspondence and information know not how best to remedy existing evils. It is noble to provide for the afflicted and the destitute, and right to punish the criminal, but the philanthropist who sees one generation of paupers providing the next, who beholds insanity too often transmitted or originated as a result of errors in marriage or habits, and who sees vice spring out of the filth and bad air and unfit homes, and then subjected to punishment, not reformatory, cannot but inquire if it would not be wiser and more economical legislation, by sanitary regulation and information, to dry up the sources of degradation as well as to make provision therefor. Ounces of such prevention are better than manifold pounds of cure."

Qualifications for a Surgeon.—Every aspirant for surgical honors is sure to be told early in his course by some kind friend or other, that to be a good surgeon a man must have a lion's heart and a lady's hand. Well—he looks down at a hand of anything but feminine proportion, and looks back to his sensations at the first operation he witnessed; and he is apt to conclude that he has chosen the wrong path in life. By-and-by he finds that by constant practice in the use of instruments his fingers have acquired a new delicacy and flexibility; and he finds, too, that as the source of the lion's courage lies in consciousness of strength, so the moral courage and firmness typified by the lion's heart, may come to him as sure results of better knowledge and training and self-reliance. Uncertainty and ignorance can hardly produce anything but cowardice or rashness; true courage is associated with judgment and reflection. —*Introductory Address at St. Thomas's Hospital*, Oct. 2, 1865, by William M. Ord, M.B., London.—*Medical Times and Gazette.*

Yellow Fever.—In consequence of the arrival, on the 24th ultimo, of a ship at Fortress Monroe from Matanzas with yellow fever on board, the Health Officer of this Port has orderdd all vessels arriving from the infected port to anchor at the Lower Bay. The disease is also reported to have made its appearance at New Orleans.

Errata.—On page 211, twelfth line from top, for *vision* read *vein a.*

Original Communications.

CLINICAL THERMOMETRY IN DIPHTHERIA.*

By JOSEPH G. RICHARDSON, M.D.,

DELEGATE FROM THE CAYUGA CO. MEDICAL SOCIETY, NEW YORK.

Though simplest among the many contributions which during the past decade medicine has received at the hands of her sister sciences, such as the endoscope, sphygmograph, and laryngoscope, the clinical thermometer seems to promise the most general and practical advantage, inasmuch as it requires for its application no prolonged experience or particular instruction, and may be usefully employed in almost every case which demands the study of either specialist or general practitioner. Its instrumental aid has thus far been invoked and its capacities tested more or less completely in a majority of the diseases which come beneath our notice; but among the minority which have hitherto remained almost untried by its standard, probably none are of more importance than diphtheria, which, on account of its general prevalence and its obscure etiology, as well as its fatality, so great and sometimes so unexpected, appears to require further elucidation at the hands of every scientific physician. The seeming neglect in this respect which it has undergone may be, no doubt, in part ascribed to the fact that it is a disease not very common in our chief cities, and especially unusual in those large hospitals where, judging by notices published in medical periodicals both of this country and of Europe, most thermometric researches thus far recorded have been carried on.

The circumstance of being located in an intensely diphtheritic region, by rendering necessary an almost daily intercourse with different grades of the affection during the past winter, has afforded me an opportunity to supply this omission and to record numerous observations upon the range of temperature in diphtheria, of which I propose to give an abstract in this paper, and also to set forth a few important deductions as to their prognostic and therapeutic worth, which I hope may at least furnish a basis of data for more extended investigation, and constitute a nucleus around which may be gathered other facts which shall combine with these to afford invaluable assistance in many a future struggle with this formidable affection. Who, indeed, that has been called upon to combat this most deceitful malady, and has beheld the insidious foe creeping onward and downward towards the tracheal aperture with an unseen and stealthy progress, which, if unchecked, must soon hurry its victim to the grave, has not ardently desired some feasible method of discovering how rapid was its course when it passed beyond the bound of direct vision, and how soon the cessation of its advance might be expected? that he might on the one hand inspire with new hope the despairing patient, or on the other arouse to new energy his own and the attendants' efforts. Or, again, which of us who has been called upon to undertake the heavy responsibility of performing or abstaining from tracheotomy has not felt, as the diphtheritic patient, gasping for breath, turned upon us his imploring eye with a whispered but eloquent appeal for relief from his agonizing sufferings, an anxious longing for some test which should indicate with an approach to certainty how near the violence of the disease was spent, and also what stock of failing strength remained to support the system under the operation? Such a means we have offered to us in the clinical thermometer, which for its aid to our profession, not only in diphtheria, but likewise in others of "the ills that flesh is heir to," must, I think, hold its place with the stethoscope of Laennec and the plexiimeter of Piorry.

Perhaps these statements can be most satisfactorily illustrated by transcribing from my note-book the records of two or three severe cases, and then giving an abstract of results from the whole series of thermometric observations, which are about sixty-five in number. The first case selected was remarkable for the high temperature (being more elevated than any other noted), the quantity and rapid formation of the exudation thrown out, and the promptness with which it yielded to treatment. Miss Sarah S., aged seventeen, of fair complexion, nervous temperament, and rather delicate constitution, was attacked on the 21st of February, 1867, with very severe headache, pains in the back and limbs, accompanied at first by slight rigors, which gave way after a few hours to high febrile action. About 9 P.M., when I saw her first, her pulse was 132 per minute, and her temperature, as ascertained by introducing the bulb of a clinical thermometer into the axilla, closing the arm tightly over it, and allowing it to remain eight minutes, was found to be 102¼ degrees. Her right tonsil was much swollen, deeply injected, and very painful, but had only three small spots near its centre; her strength was much prostrated, so that she sat up with difficulty for me to examine her throat. On the following morning, February 22, her pulse was 120 per minute, her temperature 102 degrees, the right tonsil was covered with a patch of thick, heavy, false membrane, whose area was estimated at 70 square lines, while the left exhibited a similar deposit over about half that much surface. Her headache was much relieved, although the pain in her limbs and prostration of strength remained about the same; her tongue was much coated, breath very offensive, and anorexia complete. In the evening her pulse had fallen to 100 beats per minute, and her temperature to 100 degrees; the superficial area of false membrane on each tonsil was about the same as observed on the previous visit, but the circumjacent redness had somewhat lessened; she had hardly any headache; the pains in her extremities were much diminished; her appetite had commenced to return, and she had attempted to sit up during the afternoon, though compelled soon to relinquish the effort on account of the nausea which it produced. February 23.—I found that my patient had slept well the night before, and that her relish for food was greater, although the tongue was much furred, and she had still a little headache; her pulse beat 88 times in the minute, and her temperature had sunk to 99¼ degrees. Most of the false membrane had disappeared; on the right tonsil a surface of about 20 square lines, and on the left one of 30 square lines was, however, still covered; the soreness at the time of my visit greater on the left side than on the right, although the latter had been first attacked. February 24.—Patient sitting up; pulse, 108; temperature, 98¼; right tonsil clear of false membrane; patch on left tonsil of about 5 square lines, situated near the top; has a little pain on swallowing, but less than yesterday; headache and pain in the limbs entirely gone, appetite good, tongue cleaner, fauces almost natural in color. February 25.—Pulse, 84; temperature, 97½; throat quite clear of deposit, although the act of swallowing is still accompanied by a little pain; no headache; feels stronger; and has a good appetite, with whose assistance she rapidly convalesced.

Case II. is chiefly worthy of note as showing the energetic efforts made by nature to overcome a violent

* This paper was read before its appropriate section at the late meeting of the American Medical Association, at Cincinnati; but on account of the limited number of cases observed, returned for confirmation of its conclusions by further data. In order to obtain these the author invites the assistance of any members of the profession who may feel interested in the subject, assuring them that their contributions will be most thankfully acknowledged.

attack of the disease, aided by unfavorable hygienic influences. It is that of Mr. Gilbert C., aged twenty, of vigorous frame and strong constitution, having never been sick before in his life, who was attacked on the 1st of March, 1867, with severe sore throat, headache, pains in his limbs, &c.; but, being unacquainted with illness, refused to see a physician until the morning of the 4th of March, when I was sent for and found him suffering from a good deal of headache and pain in his throat, which upon examination exhibited great swelling of the tonsils, so that they met in the middle, pushing the elongated uvula forwards; the right tonsil was the most affected, being covered with a layer of yellowish false membrane, estimated at 170 square lines in area, while the left was coated to the extent of about 80 square lines; his pulse was 80 per minute; temperature, 99½. At 6 P.M. of the same day his pulse beat 90 per minute, and his temperature had risen to 101½ degrees. He stated that he thought he had taken more cold the evening before, that his throat was fuller, and he felt more as if he must strangle during the night. March 5, at 10 A.M. his pulse was 87; his temperature, 100¾; had great difficulty of breathing all night—so much so that he was unable to lie down, but sat up in a chair; was too distressed to admit of any examination of the fauces. At 8 P.M. on the same day his pulse was 84, and his temperature 100 degrees. March 6, 9 A.M.—Pulse 86, and more feeble; temperature, 100 degrees; throat feels sore, but not much painful when at rest; on examination found to be less red and tumefied, so that the tonsils lay one quarter of an inch apart. The false membrane on the right tonsil covered about 60 square lines, on the left 30 square lines. Sat up all night in his chair, but dozed a little; ate a good breakfast with some relish; but his whispering voice and slight croupy cough made me feel very anxious in regard to his safety. At 6 P.M. his pulse was 96; his temperature, 99½. He complained, however, that his head ached a good deal, and both he and his relatives dreaded the occurrence of brain fever, to which they stated their family was predisposed. The visit this evening was made in consultation with Dr. Test; and although the suppressed croupy cough (much more marked since morning), the severe headache, and the intense feeling of strangulation, all combined to render our prognosis unfavorable, yet the regular decrease of temperature, as indicated by the thermometer, from 101½ on the evening of the 4th to 100¾ on the morning, 100½ on the evening of the 5th, 100 in the morning, and 99⅔ at the time of our visit on the 6th, encouraged us to entertain the hope that the disease was so far abating, that should these symptoms be, as we anticipated, the results of partial separation of the false membrane, about to come away, a favorable termination might yet be expected.

On the morning of the 7th, at 9 A.M., I found his pulse only 76; his temperature, 99½; his cough loose and resonant, and his breathing comparatively unembarrassed. I learned from his attendants that although the cough continued to become more croupy during the night, about 5 A.M. something seemed to loosen in his throat, feeling, as described in the patient's own words, as if "a cork was going backwards and forwards in his windpipe," which flapped up and down with a noise audible to his nurse for about half an hour, and was finally expelled with a violent struggle, during which suffocation appeared immiuent. Since that time he had felt much easier, slept for about an hour, and was able to breathe and swallow with much more comfort.

At 6 P.M. on the 7th I found his condition still improved, except that his pulse, which was 84 per minute, was rather more compressible; his temperature was 99⅔.

I learned that about four and five o'clock that afternoon, respectively, he had severe choking spells, and after violent efforts coughed up two pieces of false membrane, which had been saved and were shown to me. The larger fragment was about two and a half inches long, half to three-quarters of an inch broad, and one-sixteenth of an inch in thickness. The smaller was nearly an inch square, assumed when floated out in water a semi-cylindrical form, and bore upon its thin convex surface distinct impressions of three of the tracheal rings, rendered more distinct by the fact that the intermediate portions of membrane were stained of a pinkish tint, apparently from the extravasation of blood.

March 8, 9 A.M.—His pulse beat 88, his temperature stood at 99¾ degrees. The tonsils were less swollen, and the exudation so far diminished that it covered an area of only about ten and five square lines on the right and left sides respectively. Had a severe attack of epistaxis last evening, notwithstanding which he slept some four hours, and felt better at the time of my visit.

In order to avoid occupying valuable time unnecessarily, I will proceed no further with particular notes of this case, merely stating that after a relapse of diphtheria, apparently the result of taking cold, he gradually improved until the 10th of April, when I was recalled to his bedside, and found him the subject of double pneumonitis, contracted by sitting at a window without a vest on, which proved fatal on the fifth day of its course.

Case III.—Miss Caroline S., æt. thirty-six, medium height, dark complexion, naturally of good constitution—perhaps a little debilitated by an attack of diphtheria about two years ago—was seized with sore throat on the 27th of April, 1867, while riding out after dark. When called to see her the day following, at 5 P.M., I found her pulse 120, her temperature in the axilla 102 degrees. The right tonsil was a little swollen, and had two or three small specks of exudation upon it; the left was a good deal tumefied and reddened, showing near its upper part a patch of whitish false membrane, covering an area of 30 square lines. April 29, at 5½ P.M., I found her pulse 112, her tempetature 101 degrees. Her headache was much less, but her throat was more sore and the difficulty of swallowing greater; slept about half of last night, and has eaten some food, but without relish. False membrane on right tonsil about 10 square lines, on left tonsil 140 square lines; palate very œdematous, but not coated with exudation. April 30.—Her pulse was beating 108 times per minute; her temperature, 101½ degrees; respirations, 24 per minute. Left tonsil less sore and less swollen, but entirely covered with a patch of false membrane, estimated at 180 square lines. Right tonsil felt sore to-day for the first time, and at the period of my visit was quite painful and swollen, coated with about 100 square lines of exudation. Slept a little last night, but was awake often. Feels weaker than yesterday, so that it makes her dizzy to try to stand erect; but the headache and the pain in her limbs rather easier.

May 1.—Her pulse beat 104, her temperature 100½ degrees, and her respirations 26. Left tonsil exhibited 120 square lines of false membrane, which was quite ragged and much loosened at the upper part; right tonsil more coated than yesterday, showing about 140 square lines. Had no pain in her limbs, and less in her throat, but feels much weaker, and her head aches more.

May 2, 5 P.M.—Pulse 104, temperature 100½ degrees. Slept better the night before, and had neither headache nor nausea during the day; did not feel any weaker than the day previous. Right tonsil about the same coating as yesterday, 140 square lines; left tonsil 70 square lines, and reduced to about half the magnitude it had yesterday.

May 3.—Pulse 100 per minute, temperature 100 degrees. Left tonsil clear of exudation, but the posterior half arch behind it is covered with an elongated patch of

about 30 square lines in area; false membrane upon the right tonsil estimated at 90 square lines. Palate still œdematous, but less so than yesterday. Soreness of throat diminished. No headache, no nausea. Slept most of the night, but perspired freely since daylight, and felt weaker than the day previous.

May 4.—Pulse 92, temperature 99¼ degrees. Left tonsil quite clear, and its posterior half arch only coated to the extent of about 5 square lines. Exudation on right tonsil estimated at 70 square lines. Slept all night; throat less painful; and although she took less stimulus, she felt stronger than she did the day previous at the time of my visit. Being the last time I saw the patient before my departure for Cincinnati, I can give no further notes of the case, which I hope, however, has by this time progressed to a favorable convalescence.

As these three well marked examples of the disease give a very fair exposition of the thermometric changes which occur during its course, I need occupy no more time in the narration of particular cases, but may proceed at once to detail briefly an abstract of all the observations I have made in the whole series of twelve attacks. Of the *first day* of any attack I have no record. On the second my notes give the mean temperature 100½, an average of thirteen observations, of which the highest was 102½ degrees, occurring in two instances, and the lowest 99 degrees; the average pulse on the same day was 104 beats per minute. On the third day I find the mean temperature, as deduced from fourteen observations, 99⅔ degrees; the pulse averaging 96 beats per minute. On the fourth day the average of ten observations gave a temperature of 98⅘ degrees, while the average pulse had fallen to 85 per minute; while on the fifth day the average temperature had reached the normal standard of 98½, while the pulse beat 72. I should mention that two of these patients were the subjects of valvular disease of the heart, and that the slow rate of their natural pulse has some slight effect in reducing the average frequency of the pulse as above given.

While the cases thus detailed are perhaps too few in number to insure absolute certainty for the following deductions, which further observations may in some minor respects modify, yet it would seem that we may safely draw the following general conclusions:

First—That the thermometric range in diphtheria is less elevated than that of most other acute diseases, and that hence in marked cases a comparatively low temperature of 102 or 102½ degrees should not mislead the physician into considering the attack as of little importance.

Second—That as the changes of temperature appear to bear a closer relation to the amount of false membrane than do the variations in the pulse, we may on the one hand feel more assured of approaching convalescence by its fall, or on the other hand must entertain graver fears for our patient's safety, should it steadily rise, than by finding corresponding alterations in the rapidity of the heart's action.

And *thirdly*, therefore, that in these alarming cases where the disease invades the larynx, and we are called upon to perform tracheotomy, if it affords any hope for the patient, a careful record of the thermometric changes supplies us with the best guide hitherto discovered, whether the exudation will be apt to extend rapidly further, and so render that serious operation utterly fruitless.

THE CINCINNATI JOURNAL OF MEDICINE has been transferred to Indianapolis, and its name has been changed to that of *The Western Journal of Medicine*. Dr. T. Parvin is the editor.

REMARKS ON THE

EMPLOYMENT OF CHLOROFORM

AS A THERAPEUTIC AGENT, WHEN TAKEN INTO THE STOMACH.

By E. McCLELLAN, M.D.,

ASSISTANT SURGEON AND BREVET MAJOR, U.S.A.

THE internal administration of chloroform, in the treatment of delirium tremens, and other neuroses, which has lately been revived with much success, is by many medical gentlemen considered a procedure of questionable propriety. These doubts of the therapeutic value of this drug arise, in the majority of instances, from the fatality which has attended its use as an anæsthetic agent. But objections are frequently advanced upon the ground that the exhibition of chloroform sometimes fails to relieve insomnia, and the consequent delirium, and that not unfrequently it induces free emesis, in place of acting as a remedy for nausea and vomiting.

It would indeed be strange, if among inebriates, who unfortunately compose a numerous class in every large community, idiosyncrasies were not observed, and if in the treatment of that disease to which they are liable, any proposed remedy should invariably produce the same results; but if in the majority of a given number of cases a decided and beneficial action is obtained, the cause of failure in the minority may as justly be sought in the individual, or in extraneous causes, as in the drug. Thus chloroform, which has been highly considered in the treatment of nausea and vomiting, produced by sea-sickness, pregnancy, and nervous irritation from other causes, may, when containing impurities, only aggravate the disorders for the removal of which it is administered. On the other hand, idiosyncrasies may be combated in vain, since they are not to be overcome; the instances are so well known of certain drugs, harmless to the many, but exercising invariably an unpleasant influence over a few, that any enumeration would be unnecessary. In a somewhat extended experience, in which the remedial power of chloroform has been carefully observed, very few instances have occurred in which its administration caused vomiting; and even in these cases, with but one exception, the same amount having been repeated, after a short interval, was retained, and produced the desired effect. Of the instance in which it became impracticable to continue its employment, the cause was found in an intense repugnance which the patient conceived, and which became so strong, that from that time the ethereal flavor invariab y produced nausea and vomiting.

It may safely be accepted, that an over-dose of chloroform would most likely be quickly ejected by the stomach. To this fact are to be attributed the very few instances on record in which death has resulted from over-doses, which have been taken either by accident or from criminal purposes. Still this proposition must admit of qualification, since chloroform has produced violent poisoning in some cases on record—in a few others, death.

In the successful employment of chloroform as a remedial agent, much stress has been laid, by observers, on the great variations which may be made from a standard dose. A fluid-drachm, which in the majority of adults will procure sleep, being taken as a standard, it may be increased or diminished *pro re nata*; but in those cases which indicate the production of a decided hypnotic effect, it is certainly advisable to bring the patient rapidly under its influence. In fact, it will be found, that among the most frequent causes of failure

in the use of chloroform, are the insufficient doses exhibited, and the length of the interval between them on their repetition.

The impunity with which chloroform may be given in large doses has been frequently illustrated within my observation, and its application has not been confined to the treatment of delirium tremens alone. In a case of epidemic cholera occurring in a delicate female, who was in collapse, pure chloroform, in drachm doses, was four times administered, at intervals of ten minutes, with the most decidedly beneficial results. The cramps, vomiting, and purging were arrested, after which the remedy was repeated in half-drachm doses every thirty minutes, for two hours, when reaction was fully established. But still more encouraging has been my experience of the advantages to be derived from its exhibition in full doses, at the inception of disease; and especially does this refer to the treatment of delirium tremens.

It is imperative that chloroform about to be ingested should be chemically pure; as the employment of a specimen which has been adulterated with ether or alcohol, or one in which decomposition has taken place, or in which the heavy volatile oils are present, will either yield negative results or may be positively injurious. In order to avoid this danger, whenever a doubt exists, the specimen should certainly be subjected to the various tests.

Care should always be taken when about to administer chloroform by the stomach, especially to persons of a delicate organization, that it be suspended or enveloped in some vehicle which will disguise the pungent sweetness of its taste, as from it alone nausea, vomiting, or an intense antipathy may arise. To others less sensitive a small quantity of iced water will be sufficient; for the stimulation of the mouth and fauces, as the remedy passes, is but momentary, not more unpleasant or powerful than the same amount of pure alcohol would be to an uneducated surface; and when it reaches the coats of the stomach, the sensation, being that produced by a diffusible stimulant, is, in the majority of instances, a pleasing one. That pure chloroform cannot long remain inert, when taken into the stomach, will readily be conceived from its physical properties. Impelled by its specific gravity it must pass quickly from the stomach into the intestinal canal, and through its peculiar volatility is soon converted into vapor. These characteristics render its absorption not only more prompt than those of the majority of other remedies, but more certain, even when the vital powers are all but exhausted. The rapid penetration of the densest tissues by chloroform vapor, and its power as an antiseptic, have been established by the experiments of Augend and Robin.

The effect produced by chloroform upon the nervous system can at best be ill defined. That it acts peculiarly for the relief of disordered nerve ganglia; that it diminishes congestion in its varied forms; and that it differs materially in its operation through the stomach, from its action when employed as an anæsthetic through the lungs, is evident, from the results obtained.

Administered to the digestive organs it acts as a diffusible, stimulating hypnic, possessed of diuretic and diaphoretic properties, and when taken in unusual doses, as an inebriant and irritant. Its therapeutic action is peculiarly that of a neurotic, and influenced by the extent to which it is administered, may be employed to rouse the nervous system when depressed, and to tranquillize it when over-excited; or in other words, its contact with the nerve centres is sufficient to restore to them the power of recovering their equilibrium, and of reëstablishing their normal influence over dependent structures. This is shown in delirium tremens, the delirium of fever, insomnia, and diseases of that class, by the natural, not comatose or anæsthetic sleep, which will continue for hours after the quantity introduced through the stomach into the system has been eliminated. Its power is further shown in the cold stage of intermittent fever, and in the various rigors in which the nervous depression, with its distressing symptoms, is relieved, and reaction established. Also in epilepsy, infantile and puerperal convulsions, painful spasmodic affections, and kindred disorders; it is manifested by the rapidity with which the brain recovering from its temporary irritation, the convulsive or spasmodic movements are arrested. But still more striking is the power exerted over congestion, by restoring the tonicity of the blood-vessels, and thus relieving the local hyperæmia.

Such exhibition of chloroform does not, in the vast majority of instances, derange or impair the digestive power; but reversely, its effect, again, by ganglionic influence, is that of a "food tonic," and in certain impaired or depraved conditions of the system, even in those whose chief characteristic is extreme irritability of the stomach. After its exhibition large quantities of concentrated nourishment are eagerly received. This craving for food, or ability to receive, retain, and digest unusual amounts of nourishment, is, in such cases, due to the chloroformic awakening of the great life centres to the requirements of the system, and should not be counteracted by other means than the natural stimulus of the body—*food*.

Perhaps one of the most interesting exhibitions of the power of chloroform is the rapidity with which, acting as a diuretic, it removes bile from the blood and skin. In a case of jaundice, in which the entire surface of the body was tinged, I gave chloroform in ʒ v. doses every three hours. The diuresis was excessive on the second day; the skin and conjunctiva were nearly clean, and by the termination of the third, the elimination was complete. The affinity which exists between chloroform and bile has led the former to be suggested as a test of the presence of the latter.

The experience of such cases indicates that the elimination of ingested chloroform occurs mainly by the kidneys, and that the medium of the lungs and skin is but little employed. This theory is resolving itself into a fact, despite the contrary assertions of *theoretical experimenters*.

Fully satisfied that observation will convince the most sceptical that chloroform may be internally employed, not only without endangering life, but with advantage as a remedial agent, I have ventured to submit to the profession the foregoing remarks upon its internal administration, in a few of the many forms of human suffering which it is most probably destined to relieve.

Early Menstruation.—W. A. Simmons, M.D., in the *Cincinnati Journal of Medicine*, relates the following case: M. F. P., aged eight years, of short stature, fair skin, of nervous-sanguine temperament, commenced to menstruate at the age of seven years and seventeen days, and has had a catamenial discharge regularly every lunar month since that period—one year. The mental and physical signs usual at such times in menstruating women, are well marked. She is rather larger than girls of her age, and usually healthy. The mammæ are developed but slightly more than ordinarily, and no other signs of puberty. They are people in ordinary circumstances, and have not been surfeited with the good things of this world, excepting plenty of outdoor exercise.

REMARKS ON THE TREATMENT OF FRACTURES OF THE PATELLA.

WITH A DESCRIPTION OF THE LATE DR. THOMAS TURNER'S APPARATUS,

By FRANCIS V. WHITE, M.D.,

OF NEW YORK.

(*Continued from page* 200.)

I HAVE consulted the last edition of Prof. F. H. Hamilton's able work,* and find nothing regarding appliances for treating fractured patella, but that is already mentioned. He had seen bony union in two cases. He employs the same dressing as in the edition I have, viz. a single inclined plane, well padded, especially under the knee; bandages the leg and thigh, in part, flexes the body on the thigh to relax quadriceps femoris; applies a compress longitudinally of muslin, one-quarter of an inch thick, breadth of knee, extend ng from four inches above the patella over on the tibia; an assistant approximates fragments, the surgeon secures them with adhesive plaster, two or two and a half inches wide, the length sufficient to pass obliquely on the splint, through the notches, commencing upon the compress partly above and upon the upper fragment, strapping the knee entirely ("imbricating"). The whole extremity is to be bandaged lightly for support. His plane is ingeniously fabricated; the foot piece is arranged by a hook contrivance. The inclination may be varied from six to eighteen inches; the plane is six inches wider than the limb at the knee, and is notched on both sides, four inches below the knee, the object being not to ligate the knee. The best result he gives is a quarter of an inch intersubstance.

I quote from his last edition: "Malgaigne's hooks or clamps I regard as liable to more serious objections, and notwithstanding considerable testimony in their favor, I should be reluctant to recommend them."

I select the following cases from the London *Lancet*, 1852, vol. i., p. 283: An interesting one in Middlesex Hospital, under care of Mr. Shaw. The patient, twelve years previously, was treated in the hospital for fractured left patella, resulting in half an inch intersubstance. A year subsequently he refractured it, submitted to no treatment, and in a few weeks walked. Mr. S. had an apparatus (not described) to protect the joint, which was greatly exposed, from injury, viz., separation of the fragments six inches, extensor muscle atrophied. The same article states that Mr. Adams, at the London Hospital, treated two cases by position, leaving nature to herself. One, a male, was treated less than a month; the other, a female, was treated a little more than a month. The results, firm as usual, separation a quarter of an inch. Mr. Harvey exhibited in 1858 to London Pathological Society, an ununited fracture of the patella. The patient rheumatic and gouty. Death resulted from his condition affecting his ear. The treatment of patella produced rheumatism of his limb. The Society considered that this case proved that a rheumatic, gouty condition opposed union. Mr. Gamgee in the same journal, page 366, says: "The treatment of fracture of the patella was often regarded as very simple, but there were more cases of cripples from fractures of this than from any other bone." The disputed point of bony union is referred to. Two cases are also related, treated by Mr. Cooke, Royal Free Hospital: One, oblique fracture of the patella, dressed a few hours after injury, the fragments widely separated by a figure of eight, starched bandage; result appeared osseous, favored by the speedy dressing. The other case a transverse fracture, dressings the same, time not noted, the result ligamentous. Neither was confined to bed.

Mr. Partridge, in 1861, exhibited to the Pathological Society of London a patella fractured by direct violence; bony union resulting. Autopsy made one year after the fracture. He remarked the scarcity of specimens of osseous union found in the museums of London, there being but two or three. Mr. Brooke mentioned cases of bony union, after violence, resulting from wearing an unyielding splint several months, in the popliteal space, after leaving the hospital.

A case of transverse fracture, of a pregnant woman, coaptated and held in position twenty-four hours afterwards, by a posterior splint from the middle of the thigh to the calf, in which were hooks for extension and counter-extension, is reported in Lancet for 1861, p. 484. In six weeks it appeared perfectly united. A posterior gutta-percha splint was fixed, to favor consolidation and prevent too extended movement. The seventh week she had typhoid fever, pneumonia following, and a miscarriage on eighth day of fever. Died on the ninth day. During delirium was uncontrollable; flexed her knee; twenty-eight hours before death the fracture gaped fully an inch. Necropsy revealed suppuration of the new tissue of the patella.

Mr. Wilkinson King* described a patella broken transversely, with osseous union.

Dr. T. S. Kirkbride,† late resident physician of Pennsylvania Hospital, reports six cases of fractured patella, during two years he was there. In the first and third cases, females, the result was rather more than a quarter of an inch shortening. She returned with fracture of the other patella in about six months. The result one-eighth of an inch, the upper fragment a little depressed. Second case, the union perfect, no separation appreciable. Fourth case, no separation except the small fragment a little depressed. The fifth a difficult case; had *mania a potu;* the result less than a quarter of an inch; he would not submit to advice; accidentally refractured it; separation between two and three inches, intersubstance. He returned to the hospital for treatment. Sixth case, a compound fracture, was under treatment. No particular treatment noticed.

Reports of surgical practice.‡—Six cases of fractured patella, including two refractures; of the latter, one appears to have been osseous. The patient declared there was no line of fracture. On examination, the dresser, Mr. Pern, heard crepitus. The mode of treatment of ordinary fracture of the patella, at St. Thomas's, is as follows: After the subsidence of any existing synovitis, adapt leather or gutta-percha cap splint, cut out, to receive the fragments, coaptated by horse-shoe shaped straps. A Liston splint applied, limb raised at the foot. "In some cases only the long pieces of strapping running from each side of the skin to above the upper fragment, and a shorter piece pulling upwards the lower, are made use of. M. Malgaigne's hooks do not find favor at St. Thomas's."

Ring appliance.§—Dr. W. A. Gibson (*St. Louis Med. and Surg. Jour.*, Oct., 1866) reports a case of transverse fracture of the patella. He measured sound patella, for the pattern of a ring, allowing for padding with cotton, which was cut in strips, and held by a bandage around the ring. He sewed strips of muslin to each side, placed a well padded posterior splint, twenty-four inches long, secured by a bandage, at the lower and upper ends, lightly applied; approximated the frag-

* Hamilton on Fractures and Dislocations, Ed. 1860, p. 488.

* British and Foreign Medical Review, vol. xiv., p. 133.
† Amer. Jour. of the Medical Sciences, vol. xvi., p. 330.
‡ Med. Times and Gazette, London, Feb. 16, 1867.
§ Amer. Jour. of the Med. Sciences, vol. liii., pp. 281 and 563.

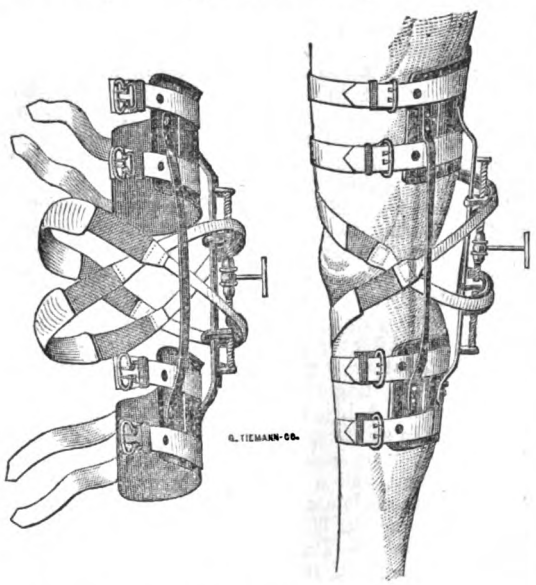
ments, applied the ring over, tied the strips over the splint, securing the ring in its place, and keeping the fragments in apposition, giving the best chance for osseous union; removed the dressing in thirty days; made passive motion; found bony union complete. June 15th, had very good use of the limb. He says: "The appliance did not give the patient the least pain, and there was no interruption of the circulation by the bandages. It was impossible in this case for the patella to escape from the ring, but possibly in some cases, as of women where there is a good deal of adipose tissue, and but little prominence of the patella, it may not be so easy to apply the ring; but I am persuaded that it will give entire satisfaction in all cases. I claim, by the application of the ring, to have reduced one of the ugliest fractures of the human frame to one of the simplest for treatment."

Prof. Paul F. Eve, Nashville (*Nashville Jour. Med. and Surg.*, Feb., 1867), records two cases successfully treated by the above plan.

I discovered in my researches that the literature of our profession was very barren of subsequent conditions of fractured patella, say a year or more, after treatment, both as applicable to the living and dead.

From the preceding investigation and the observations already made, I think myself not presumptuous in concluding, that it is within our power to have osseous union in ordinary fractures of the patella, if the fragments can be closely coaptated, even if the aponeurosis is ruptured. As near a result should be attained by art as possible, to the preceding natural condition, the work of the great Architect.

I believe the invention of the late Dr. Thomas Turner, Resident Physician to Kings Co. Hospital, L. I., New York, is the appliance to accomplish the above.



The cut represents its mechanism. The apparatus, manufactured by Tiemann & Co., New York, consists of thigh and leg-pieces of sheet-iron, with two buckled straps attached to each, united by two lateral bars and one posterior bar of steel. To the posterior bar are two troughs (part of a circle), on a double reversed screw, and by turning the key in opposite directions the troughs separate or approach each other. The apparatus being japanned, is always ready for new cases when cleaned. The apparatus should be applied in simple fractures as soon as possible; but if, in the opinion of the surgeon, it would aggravate existing inflammation, thereby jeopardizing the joint, it could be applied as a posterior splint, without using the coapting appliances, until antiphlogistic measures make it safe. The apparatus, to be applied properly, should be well padded with flannel or other material, for protecting thigh and leg from the splint and straps, quadriceps femoris should be relaxed, the limb held by the thigh portion, and buckled; also buckle the leg portion. Use an anæsthetic if necessary. First fix the lower fragment, by drawing it up, smoothing the integuments down; this being held by an assistant, the surgeon applies a strip of adhesive plaster, of sufficient width to hold the fragment, and overlaps it sufficiently to prevent any tilting up, passes the free ends of the adhesive plaster around the upper trough, crosses them and applies them to the skin. The upper fragment being coaptated, the integuments being smoothed up, a similar piece of plaster is applied around the lower trough as around the lower fragment. Interpose something where the plasters cross each other, to prevent their sticking together.

For firmness use double strips of plaster. Snip the upper edge of the upper plaster; thus a rounded edge instead of a cutting edge will be presented to the integuments, avoiding in a degree excoriation.

The next case of simple transverse fracture of the patella I shall have to treat, I shall use a part adhesive plaster and rubber coapting appliance, viz. taking measurement and having rubber tubing of sufficient length, say half the distance, with rings affixed to extremities, and the other half adhesive plaster. The adhesive plaster having been passed through one ring on one side and fixed, the strap being applied to patella as previously stated, is passed with the tubing around the trough, the free end of the plaster being passed through the other ring and made adherent, marking the plaster to note any slipping. If there should be a V-tilting, a compress can be applied over the patella. If position is necessary, a pillow can be placed under the leg. Place a pad in popliteal space if necessary. As the dressing may loosen, move the screw, and thereby separate the troughs, which will tighten the dressings. Apply new dressing when necessary. If there is much inflammation, apply bags of ice (of bladder or oil silk) intermittingly every fifteen minutes over the dressings and joints, thereby keeping the dressings dry. The apparatus should remain applied thirty or forty days; slight passive motion should be commenced on third or fourth week, the patella being held, although I deem it hardly necessary, as I noticed in the treatment of my case, that after the application of the apparatus, slight movement could be made without strain upon the patella. When new dressings are applied, the patella being held, cautious passive motion may be made until the apparatus is permanently removed.

After the apparatus is removed, the patient, to favor consolidation, should wear something to prevent too much use of the patella—say for four or six months, viz. elastic knee-cap, with a ring arrangement over patella, or posteriorly a piece of gutta-percha or leather strapped above or below the joint, either of which being softened by warm water, can be applied, and allow of a certain flexion. Passive motion can be occasionally made, but not extreme under six months.

The advantages of the apparatus are: the ease of its application; efficiency indicated by the combining of a posterior splint with coapting means. The knee-joint is exposed to the view of the surgeon and patient, thereby saving anxiety. Without further expatiating, I would state I would not dare to use any other appliance that I am acquainted with; and I think I am

sustained in this assertion by the letters I have the honor to possess of distinguished gentlemen of our profession, and the result of my own case. It may not be inappropriate to state that I had an interview with Dr. Turner in the summer of 1860. I congratulated him on his benefaction to our profession and humanity. I remarked the trouble and time I expended in the treatment of fractured patella, when house-surgeon in Bellevue Hospital in 1856–1857, by the single inclined plane and coapting compresses, bandaging the whole, etc.; whereas, if I had had his appliance, I could have saved time, and had the best of results.

Dr. T. informed me that his intention was, after danger to the joint was over, to allow the patient to be up and attend to business with the apparatus on, thus allowing nature to repair the injury. He showed me the original apparatus which he fabricated for a poor fellow, with fractures of both patellæ, of whom he made a nurse, and who was able in a short time to walk about, resulting in coaptation. I suggested to the doctor the propriety of introducing his apparatus to the profession immediately. He thought it prudent not to, until by experience he could improve it.

I asked his permission to allow me to do so. He acquiesced, promising to write a paper subsequently. On consulting a valued friend in our profession, I was advised not to do so until I could present at least six cases in which it had been used. For this and for other reasons unnecessary to mention, it has been delayed until the present.

During the last few years the merits of Dr. Turner's apparatus have been thoroughly tested by not a few eminent surgeons of New York and vicinity, all of whom speak of it in the highest terms of commendation. Among these gentlemen I may mention Drs. J. M. Carnochan, W. Detmold, J. C. Hutchison, G. Cochran, R. C. Styles, and E. C. Mundy.

In conclusion I beg leave to detail the following interesting case occurring in my practice, in which the apparatus was satisfactorily used.

Mrs. R., Houston street, healthy, fleshy, aged 41, received a transverse fracture of her left patella, about its middle, July 11, 1860, by muscular action, in going up her stoop, her left foot having slipped on the first step. She fell in a sitting posture.

I placed the whole extremity in position on a well padded, inclined plane, and applied lotions. On my evening visit, the patient complaining of an unendurable burning sensation about her foot, I removed the dressings, leaving nature untrammelled in position.

I applied Dr. Turner's apparatus, the 14th instant, continuing the lotions. On the 16th, dressings being loose, I reapplied them. Stopped the lotions. I dressed the fracture subsequently as was indicated. I used double straps of adhesive plaster about two inches wide, and of sufficient length to cross each other on the troughs, and brought up the sides, marking the ends, to note slipping. The upper strap produced a little excoriation, which was relieved at the suggestion of my patient, by snipping the edge of the plaster, which, on application, presented a rounded surface; even afterwards I was somewhat troubled; but, by varying the pressure, underlaying with a small piece of lint, it did well. Placed a pad in the popliteal space, for support. I tried straps of adhesive flannel, they slipped, and crescentic pads of cork covered with shammy; they produced pain. I used the screw as indicated. On September 8th, permitted my patient to walk about her room, with apparatus on; the action produced inflammation of the integuments, where the straps were applied. September 21st, removed the apparatus, after a treatment of sixty-nine days. My object was to obtain bony union. I cautiously made passive motion first about the third week; afterwards, when I applied new dressings, I noticed the apparatus would allow some movement of the joint, not enough, though, to put strain on the ligament. After the removal of the apparatus, I increased my passive motion. Had the patient occasionally sit on a table, and swing the leg. I did not apply any protection to the patella, either knee-cap or splint, in popliteal space, which I now regret, as nature might in six months have consolidated the union. November 28th, I made my last professional visit. At that time the patella appeared united by bone, as I thought. The functions of the joint were restored. My case tested the apparatus, there being a large thigh and leg and small patella, about half an inch of integument, fascia, etc., over the patella (judging from other patellæ), with the swelling, making a thickness of over an inch, through which I had to coaptate the fragments. I believe I could not have treated her with any other apparatus with a shadow of success.

I made an examination of the patella, April 22nd, 1867. Found an intersubstance of about half an inch. Integuments over patella movable, but thicker than over opposite patella. She has perfect use of her limb, with the exception of going down stairs; notices a feeling of lack of support.

80 First Street.

CASE OF

ENTIRE ABSENCE OF ANUS WITH RECTO-VAGINAL FISTULA.

SUCCESSFULLY TREATED BY

HOWARD PINKNEY, M.D.,

SURGEON TO OUT-DOOR DEPARTMENT BELLEVUE HOSPITAL.

Corinna P—, aged 8 months, was first seen by me 21st November, 1866. The infant was exceedingly small, very thin, and had a sallow unhealthy appearance of the skin, and very fretful. Mother states that the child has never had a free discharge from its bowels, and that at the present time it is only after severe straining efforts in which the little sufferer turns almost black in the face, that a small thread-like portion of fæcal matter is forced through the vagina. She also says that since the birth of the child she has never been able to keep its extremities warm.

On examination I found an entire absence of anything that resembled an anus. The skin between the ischiatic tuberosities, vagina, and coccyx, was distended and smooth, with the exception of a raised ridge or raphé, extending from the posterior fourchette to the coccyx. On examining the vagina I found a small opening (sufficient only to admit a large-sized probe) on the posterior wall of the vagina, and about a quarter of an inch from its orifice, communicating with the rectum, and through which fæcal matter was forced during the straining efforts. Examining the abdomen, I found it very much swollen and distended.

As the child was rapidly failing, and as the mother and friends had given up all hopes of its recovery, I advised an immediate operation as the only means of relieving the little patient. The mother consented after a few days, and on November 28, assisted by Dr. R. F. Weir, I operated as follows: The child being placed on the lap of an assistant, was brought under the influence of chloroform by Dr. Weir, and being then placed in the position for lithotomy, a probe was introduced through the opening and directed towards the perineum. I then made an incision from a point a few lines posterior to the fourchette to near the point of the coccyx in

the median line, and carefully dissected inwards in this line until I came to the rectum, which was readily distinguished, as it was greatly distended by impacted fæcal matter. The incision posteriorly extended a little more than an inch in depth; anteriorly 4 or 5 lines. The probe that was passed through the opening was forced down, and could be readily felt at the bottom of the sac. Opening the gut upon the point of the probe, I introduced a director bent nearly at right angles, and then by means of a probe-pointed bistoury enlarged the opening to the size of the external wound. As soon as the gut was exposed straining efforts commenced, which continued after it was opened; but no fæcal matter came away, although it could be readily seen impacted there in large quantity. By means of the handle of a spoon and of a scalpel, I was enabled to dig out a large quantity of hardened fæces, when a large quantity of consistent fæces came away, taking the form of the external opening and being at least an inch in diameter. After carefully washing out the bowels with an injection of warm water, I brought down the edges of the divided intestine, and united them to the margin of the external wound by means of silver sutures; then placing a pledget of oiled lin tin the opening to keep the surfaces from uniting, the operation was completed.

The next day, on visiting my little patient, I found her looking much brighter than I had ever seen her before. She had slept well, and had had one or two free movements from the bowels. Examining the wound I found the sutures through the intestine torn out, and the intestine retracted within the wound. I made no attempt to draw it down, but merely removed the sutures, and distended the opening (which showed a tendency to unite) by means of my finger and the blades of a dressing forceps, after which, I renewed the pledget of lint. This treatment of dilatation by means of the finger and forceps, with the occasional use of a rectal bougie, was continued almost daily up to Dec. 14, when the wound was entirely healed, and was lined by a smooth and shining membrane. This opening was sufficiently large to admit a number 11 rectal bougie. There seemed also to be a tolerably well formed sphincter developed, which kept the external opening closed, and would grasp the finger when introduced. No attempt was made to close the recto-vaginal opening, except by cauterization of its edges with nitrate of silver, hoping that it might possibly close of itself, or in case it did not, intending to operate at some future time.

Old Folks.—The St. Louis *Medical Reporter* speaking of "Old Folks," says: The entire number of persons who, according to the census, have attained the great age of 100 years and upwards, is probably larger than most of our readers would guess. It is just 1,200; of these there are white, 440; black, 688; mulattoes, 56; Indians, 26. Women attain a high longevity in greater numbers than men, and black people than white. The oldest persons are a white woman in South Carolina, and an Indian woman in California, aged 140 years. The oldest blacks, two males and two females, are 130 years. In proportion to numbers, twelve times as many blacks as whites exceed a hundred years of age. By the best calculations made, it is ascertained that the average duration of human life is greater in the United States than in any other nation.

Milk in the Breast of a Male Infant.—Mr. Owens reports a case in a recent number of the *Lancet*, of a male child, 9 days old, from each of the breasts of whom he obtained half a drachm of milk.

Original Lectures.

OPERATION FOR HARELIP.

WITH REMARKS

By PROF. FRANK H. HAMILTON, M.D.,

BEFORE THE CLASS OF '65—'66 OF

BELLEVUE HOSPITAL MEDICAL COLLEGE.

(*Continued from page* 154.)

Gentlemen—In connection with my account of a single fissure, I ought to describe to you a method which I have devised and practised for the cure of those simple indentations of the lip which are sometimes congenital, but much more often the result of a partial failure in the attempt to close a harelip.

When, for example, the fissure only extends up into the lip two, three, or four lines, I proceed as follows:—

With a narrow, sharp-pointed, straight bistoury, I transfix the lip at a point about three lines above the apex of the fissure, and proceed to cut downwards and outwards until within three or four lines of the free border of the lip. Carrying my knife back to the point at which the incision commenced, I cut downwards and outwards again, parallel to the opposite margin of the fissure, to within three or four lines of the free margin of the lip. The triangular loop thus formed is at once forced downwards, and the raw and opposing edges of the fissure brought snugly in contact by one or two sutures.

If the fissure was pretty deep, the loop thrown down will be long, and will require the support of a single fine suture to retain it in place; and even then it will hang down very obtrusively; but by the gradual contraction of its tissue, and perhaps in part by ulceration, it will eventually assume a very natural appearance.

If, however, the fissure was not deep, the loop will take care of itself, and the result will be a perfect restoration of the line of the lip.

You must not omit, gentlemen, to apply the adhesive plasters in this case any more than in a case of complete fissure; nor to extend them well down, so as to completely cover in the lower margin of the upper lip. This measure I regard as of great importance in its bearings upon your complete success.

DOUBLE HARELIP, COMPLICATED WITH FISSURE OF THE BONES, ETC.

It is very seldom that we meet with double harelip not associated with fissure of the bones. This variety of harelip (with fissure of the bones) is found to exist in two principal forms:

First, That in which the central piece of alveolus occupies its normal position; that is to say, is situated in the line of the alveolar arcade, and in which case it is, in general, pretty well covered in front by integument. This central piece of integument may be either quadrilateral or nearly triangular, with its apex directed downwards.

My method of operating in these cases is the same as in single harelip, with only such few points of difference as the peculiarities of the deformity will render necessary.

The central piece is first freshened, or excised freely, on its two margins down to the alveoli; but not dissected up or detached in any degree from the alveoli. This part of the operation ought to be made first, because the principal source of the hæmorrhage is from the second or next step of the operation.

If the central piece is very short, whatever its form may be, it must be made into a triangular form by incisions, with its apex directed downwards.

The outer margins of each fissure are next to be dissected from the bone, and usually to a point fairly up underneath the alæ. These margins are then cut straight and freely with very strong scissors.

A large straight needle, armed with a strong silk ligature, is now made to enter near the outer margin of the ala, upon one side; it is then carried across, in front of the central piece of alveolus, beneath the base of the integument covering this piece, and brought out at a corresponding point under the opposite ala. This suture is then tied firmly over the central piece of integument, having previously protected the integument by a small roll of patent lint. With this precaution there is no danger of strangulating the central piece.

A second suture is now passed near the lower margin of the fissures in the same manner, only observing the rules laid down when speaking of single fissures, namely, to introduce the needle far from the incised margin and at the junction, or immediately above the junction of the vermilion border with the skin; and to bring the needle out at a corresponding point on the opposite side.

The second suture is now closed; and in a similar manner a third, intermediate between the two, may be introduced if it is thought necessary. The dressing is completed by applying the adhesive straps as already described.

You will be surprised, gentlemen, to find how wide a chasm you can in this way close up; and if the operation is carefully and thoroughly performed, there is but little if any more danger that it will give way, or refuse to unite, than in a simple and narrow fissure.

It seems to me absurd to talk of making this operation at "two times," as some have done—that is, of closing first one side, and when this has healed, proceeding to close the other. It can always be done more easily, and, as I think, more perfectly at one operation.

The second form of double, complicated harelip is that in which the central piece of alveolus is not on a line with the alveolar arcade, but is projected more or less forwards, in some cases standing directly forwards, and appearing as if it was a prolongation of the nose.

In order to comprehend the surgical treatment of this class of cases, it will be necessary to say a few words in relation to the anatomy of this central piece.

The alveolar, or dental arcade of the upper jaw, is formed from four centres of ossification. The two lateral portions, including the sockets of all the teeth except the incisors, are formed each from a single point of ossification. The central portion, including the sockets of the four incisors, is formed also from two separate points, which, in the process of growth, speedily come in contact by their opposing surfaces along the median line, but do not actually blend with each other; consequently, even in adult life, the two upper maxillary bones can generally be easily separated between the central incisors. Where the two halves of the incisive portion of the dental arcade lie in contact, two thin plates are finally projected upwards, one from each margin to form a junction with the triangular cartilage and the vomer; the whole of which together forms the septum nasi. The anterior extremity of these parallel plates is known to anatomists as the anterior nasal spine. How complete is the union which finally takes place between these thin, short, vertical plates on the one hand, and the vomer and cartilage on the other, I cannot positively say; but they are easily separated by maceration. It is my opinion that in early life the union is very incomplete; and that at the period of two or three years, that process which unites the vomer to the incisive portion is very narrow and feeble. So that, in forcing the central portion back, by pressure applied in front, the septum would be more likely to be bent or twisted than broken.

Upon the anterior and lower margin of this septum is situated a bulbous looking expansion; which is that portion of the alveolar arcade containing the germs of the four incisors.

Several surgical writers have spoken of this central portion as containing two teeth, or their gums. In all the specimens examined by us it has contained four teeth, or their rudiments; and of these two have generally been found on the outer margins of the central piece, and not upon its lower margin; so that, in the progress of their development, these teeth have stood directly outwards laterally—while the two remaining teeth were directly forwards, or forwards and downwards. I do not think, therefore, that it is in general advisable to attempt to save the central piece. The teeth which it contains will not grow harmoniously; and its pedicle or that process which connects it with the septum nasi, and which constitutes its only basis of support, is too feeble to make it useful. I have in most cases cut it away. In this case the operation must be made at three times, as follows.

First, the central piece of integument, which I have never found of sufficient length to serve any purpose in the formation of the upper lip, must be dissected up from the alveoli, and left attached to the end of the nose, to be used at a subsequent period in the formation of a columna nasi. At the same time, the pedicle which supports the central piece of bone is to be divided with a pair of sharp bone cutters, or with a strong pair of scissors. In dividing these, great care must be used to make the section as far forward as possible. If too much of septum is removed, the nose will have an unpleasant cavernous look. It is better to cut away too little than too much.

The bleeding from the artery of the septum I have always found troublesome. It is generally impossible to secure the artery with a ligature; but pressure with the finger continued a few minutes, will often succeed in arresting the bleeding. If necessary we may place upon it a pledget of lint, and secure it in place with an adhesive strap laid across the face. This completes the first operation.

The *second* operation cannot be made safely until after the lapse of one or two months. This is simply an operation for the closure of the fissure, and the several steps of the procedure will differ in no material respect from the operation already described for simple harelip. It is not well to attempt to make the columna at this time.

The *third* operation is not to be undertaken within less than three months after the last operation, for the reason that any lesion of the new lip, along the median line where it has but recently united, is likely to result in a destructive ulceration; and the columna cannot be made fast below to the lip without causing such a lesion.

The operation is as follows. The posterior surface of the central piece is freshened, and the two lateral surfaces, with the lower end, cut into shape, leaving it if possible about as wide as you desire the columna to be when the wounds have healed. The anterior surface of the bony septum is next freshened by scraping it with the edge of a knife; a point at the base of the lip is made raw; the lower extremity of the central piece is then fastened by a delicate suture to the upper lip, in such a manner as the peculiarities of the case and your own ingenuity will suggest. In order

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to assist the union of the columna to the septum, a small pledget of lint covered with cerate, should be laid against the front of the columna, and secured in place by adhesive plaster bands. The subsequent dressings and management of the case must be left to the judgment of the surgeon. Beyond these, no more precise rules can be given.

After the cure is complete a good dentist may supply the deficient teeth and alveoli; and he may improve greatly the form of the upper lip, giving it proper support from behind. In some cases it is better that the teeth should have been fitted and worn some time before completing the formation of the columna.

Reports of Hospitals.

BELLEVUE HOSPITAL.

CASES OF ABSCESS FROM PNEUMONIA OF LEFT LUNG.

By DR. LEWIS A. SAYRE,

PROF. OF ORTHOPŒDIC SURGERY AT BELLEVUE MEDICAL COLLEGE.

John Anderson, æt. 48, butcher; three years ago first had pneumonia of left lung; since which time he has coughed more or less, and expectorated freely. Three months ago the expectoration entirely ceased, and at that time he first noticed a small tumor in its present position over the junction of the last dorsal and first lumbar vertebræ. He states that a short time before the appearance of this tumor he felt pain over the left lung, which seemed to work around until it became seated in the present position of the tumor. He has lateral curvature of the spine, and a slight angular curvature in the dorsal vertebræ; though no history of disease of the vertebræ can be elicited, nor any signs of a still existing disease discovered.

The tumor rises abruptly on the left side of the spinal column, about four inches, and extends over to the posterior superior crest of the ilium, being 22½ inches in circumference, 10 in transverse, and 11 in longitudinal diameter. The integument covering it is somewhat discolored and quite tense. By pressure, the tumor may be partially emptied; and is again filled by allowing the patient to cough. The distance from the sternum over the left nipple to the vertebral column is four inches less than that over the right nipple. The ribs on the left side incline downwards, and overlap. There is indistinct respiratory murmur, and dulness on percussion over the greater part of the left lung, showing probable infiltration; but over a small portion near the wall there are signs of a cavity. It is impossible for him to take a long breath.

Operation.—An exploring needle introduced into the most dependent portion of the tumor, showed it to be filled with pus and serum. On being opened it discharged three pints. The opening was then closed by adhesive straps, and a bandage applied. After the operation there was an increased resonance on percussion, the patient breathed much more easily, and could take a full inspiration. In three days after this operation the abscess began to fill again, and was again opened, when it discharged fourteen ounces of pus and serum. The patient is now, two weeks after the operation, doing well, walking and riding about.

Case 2.—W. W., æt. 10; presented all the symptoms of pneumonia, with free expectoration. He remained in this condition for about two months, gradually sinking, with no abatement of the cough, but increase of expectoration, and constant pain in the left side. About this time the left side began to dilate sensibly, and gave a dull sound on percussion over nearly its whole extent. The respiration was almost inaudible, and the heart appears to the right of the sternum, with its apex pulsating near the ensiform cartilage, showing that effusion had taken place into the cavity of the pleura. The expectoration was checked for a few days, as the effusion went on in the pleura; but in a short time, when the side became distended, and the cavity appeared full, it became as free as before; leading to the belief that ulceration had taken place between the abscess in the lung and the cavity of the pleura. The patient was much prostrated. He remained in this condition six weeks, at which time pain in the side increased; a pulsating tumor began to make its appearance between the cartilages of the third and fourth ribs, near the sternum, simulating an aneurism so much that upon consultation an operation was refused. The tumor began to soften, and in two months after its appearance it ulcerated and discharged a quart of very offensive pus.

The opening was dilated, and the discharge continued very free, and *the expectoration ceased entirely*, the bowels became regular, the anasarca disappeared, and, in a word, all his symptoms were very much improved. He was placed upon supporting treatment. He continued improving for two weeks, when the opening in the chest became closed, and the *expectoration returned as free as at first, and of precisely the same nature as that discharged by the external opening.* Then fever returned with loss of appetite, and I was called again to see him. I opened the wound, and discharged nearly a quart of pus. The *expectoration ceased again entirely*, and a discharge of the same nature continued through the external opening, showing that ulceration had taken place between the pleura pulmonalis and an abscess in the lung, communicating with the bronchia; and when the ulceration had taken place in the pleura pulmonalis, the matter in the abscess was discharged into the cavity of the pleura, which accounted for the check in the expectoration during the filling of that cavity, and its return when the side became fully distended. The ulceration continued on through the pleura costalis, intercostal muscles and integuments, at the *superior* instead of the *inferior* and *most dependent* part, as we generally find it The heart being pressed out of its normal position by the presence of the fluid, brought the arch of the aorta directly under the tumor, which accounted for its strong pulsations, and caused the difficulty in its diagnosis.

The discharge continued free for two or three months, but gradually subsided, and in seven months from the first discharge it had healed entirely; leaving him much deformed, the circumference of the left measuring several inches less than the right side. Respiration could not be heard over the left side; but there was a blowing sound, which, however, gradually gave way to the natural murmur. The patient has now assumed nearly the natural murmur. He now enjoys perfect health.

From the time of the operation the child rapidly improved in health and strength, became cheerful and playful, and the sallow and unhealthy appearance of its face was changed to a healthy and even a ruddy glow.

I have related this case, not because of any particular difficulty experienced in operating or because of anything original in the modus operandi, but to show the rapid improvement which followed the operation, the great relief afforded by it, and the necessity of operating in similar cases as soon as the bowels become at all constipated. So long as the contents of the bowels remain fluid (which they did in the case above related for the first four or five months) little difficulty and suffering are experienced; but just so soon as they become

hardened, so soon do ineffectual efforts commence, the bowels gradually fill up with fæces and gas, digestion, circulation and respiration are interfered with, and the sufferings of the patient are gradually aggravated until either relieved by the surgeon or death.

Progress of Medical Science.

Death by Drowning.—In the January number of the *Union Médicale de la Gironde*, published at Bordeaux, is an interesting paper by Prof. J. E. Petrequin, of Lyons, in which are expressed some original views concerning this subject. Opportunities were enjoyed by this gentleman, in 1864, to study it in a special manner. His experience led him to the adoption of a classification, based upon a diagnosis of the physiological and pathological conditions which immediately precede and accompany asphyxia by drowning. Cerebral apoplexy, as a concomitant pathological state, denied by Orfila, and admitted by Devergie, he asserts to be one of the distinguishing forms of death by submersion. The symptoms of those who are submerged during repletion of the stomach, as after a copious repast, belong to his second class, and especially call for the evacuation of that cavity. His third class refers to those who, from fright, faint at the moment of being submerged. His fourth class comprises that condition described by most authors as characterizing death by drowning, and in which therapeutic means are designed especially and immediately to re-establish the respiratory function.

The Diagnosis of Indurated Chancre.—Dr. Lagneau offers some judicious remarks in the *Gazette Hebdomadaire*, of the 8th March, on the subject of simple and infecting or indurated chancres. The period of incubation of the indurated chancre may be less or greater than fifteen to twenty-five days. Between the perfectly soft and well marked indurated chancre, there are many intermediate degrees, which practically do not permit a positive diagnosis of the specific character of the sore. There are other reflections of interest and practical importance noted in Dr. Lagneau's communication, which is an excellent summary of the different opinions on this matter, collected from periodical publications.

Explanation of the Favorable Effect of Iridectomy in Acute Glaucoma, by Fano.—It is generally accepted that glaucoma is an irido-choroiditis, with hypersecretion of the fluids of the eye, by means of which latter a compression of the retina with consecutive anæsthesia of this membrane occurs. The excision of a piece of iris is said, by diminishing the secreting surface, to relax the tension and restore the normal pressure. In opposing this view, the author calls attention to the changes in the vitreous in the beginning of acute glaucoma, which become a physical hindrance to vision. An acute œdema of the conjunctiva is also observed in some cases, which indicates disturbance in the venous system. The vitreous, having no vessels, is nourished by imbibition from the arteries of the choroid, of the ciliary processes and of the retina, and the diminished transparency of these parts shows a change in the circulation of the vessels. If we consider, now, the rapid appearance of this symptom, with the coincidence of severe pain, as is observed in senile gangrene, may we not consider glaucoma as an inflammation of the arterial system of the eye? Iridectomy always (?) causes a hæmorrhage into the anterior chamber, whereby a direct depletion of the inflamed vessels occurs. This may be the proper explanation for the favorable result from iridectomy.—*L' Union Médicale, Memorabilien Heilbronn.*

Alterative Laxative Pill.—Dr. Gilman Davies (*Boston Med. and Surg. Jour.*) extols the virtues of a laxative pill prepared after the following formula: ℞ Pil. Aloin. c. Ferro gr. xxiv, Ext. Nucis Vom. alc., gr. vi., Pulv. Ipecac., gr. vi. *M.* Fiant pil. No. xviii. Dose, a single pill. The pills are small, about half the usual pill-size. "One of these, taken each night, keeps the bowels in a regular condition, operating without pain, and of course chiefly by its tonic power; while the whole system gently but surely feels the strengthening effect of the iron and nux vomica."

Cutaneous Absorption.—M. Charles Hoffmann has laid before the Paris Academy of Science a paper on this subject. His experiments have been made on digitalis, iodide of potassium, and chloride of sodium. He comes to the following conclusions. 1. Chemical and other agents, dissolved in water, penetrate slowly but obviously into the animal economy, by the external tegument, and it is only when the blood and other fluids are saturated by them that the organism expels them. 2. All medicaments are not absorbed in the same degree. 3. The contradictory results hitherto obtained were only due to the insufficient length of the time devoted to the experiments.—*British Med. Jour.*

Arsenic in Prostatitis.—Dr. T. B. Buchanan, of Nashville, reports that some time since he gave a patient Fowler's Solution of Arsenic, for sycosis menti; after using it a week, the remedy was discontinued and the application of sulphite of soda relieved the case. The patient had been suffering for ten years with chronic prostatitis, caused by a protracted attack of gonorrhœa, rendering him miserable and at times impotent. Nearly every remedy that has been recommended by the profession had been used in his case, but with little benefit. "To the delight of the patient and my utter astonishment," says he, "he is now perfectly well, and has been for more than a month." Since arsenic has proved beneficial in hæmorrhoids, might it not have relieved the prostatitis, as the hæmorrhoidal and prostatic plexus of veins are intimately commingled? Arsenic probably effects its cure upon the skin in disease, and that condition of the spleen and liver, after intermittents of long standing, not by any specific action upon the blood, but upon the vessels themselves, thereby equalizing the circulation and rendering it normal.—Paul L. Eve.—*Nashville Journal of Medicine and Surgery.*

Gun-shot Wounds uniting by first intention.—Dr. J. W. Thompson, in the *Nashville Journal of Medicine and Surgery*, gives four instances of wounds healing without suppurating. Three were in hospital practice, and one was in a private patient. Two of the hospital cases were long flesh wounds, and all would be classed as deep-seated. Two were made by minié balls, the third by a small round ball. There was no swelling or redness following the wounds in the hospital cases. A small scab formed over the entrances and exits, when they healed. As regards the case in private practice, the ball was discharged from a Derringer pistol, entered beneath the inferior maxillary bone on the left side, and lodged near the corresponding submaxillary gland on the other side. This patient recovered in a reasonable time. The wound now gives him no trouble.

The Human Bite Poisonous.—A singular occurrence has just happened in Arth, France. A Lieutenant Felchin was some time ago bitten in the thumb by a man named Muller; but he thought nothing of the wound, and went next day a journey on his private affairs. On reaching the Balse, he found his hand and arm began to swell, and a medical man declared that

the case was one of poisoning by a human bite. He at once returned home in haste, but refused to have the arm amputated. The inflammation increased frightfully, and he died some days after in horrible suffering. —*Nashville Journal of Medicine and Surgery.*

PERCHLORIDE OF IRON AS A HÆMOSTATIC.—The *Antwerp Journal* states that perchloride of iron combined with collodion, is a good hæmostatic in case of wounds, the bites of leeches, &c. To prepare it, one part of crystallized perchloride of iron is mixed with six parts of collodion. The iron should be added gradually and with care, otherwise such a quantity of heat will be generated as to cause the collodion to boil. The composition, when well made, is of a yellowish-red color, perfectly limpid, and produces on the skin a yellow pellicle, which retains great elasticity.—*Nashville Medical and Surgical Journal.*

ETHER SPRAY IN STRANGULATED HERNIA.—Dr. John Borelay reports in the *British Medical Journal*, a case of strangulated hernia, in which reduction was accomplished after the use of ether spray. The pain induced after the most gentle handling of the hernial tumor was so intense, that Dr. B. had to desist from taxis. Having with him Richardson's Ether Spray Apparatus, and thinking it might be useful in lieu of ice, it was determined to invert the patient, apply the ether spray short of freezing the skin, then to attempt the reduction, and if failure was the result, to operate with the knife. The head and shoulders then being supported on the floor by some pillows, and the buttocks raised as much as possible against an inclined plane, extemporized by an inverted bedroom chair, the ether spray was directed in the usual way on the swelling, for about forty seconds, when a minute spot appeared white. The spray was at once removed, and on applying the fingers of the left hand on the swelling for about ten seconds, accompanied by the most trifling pressure, the hernia was reduced, to the great delight and satisfaction of all. The man made a first-rate recovery.—*Medical and Surgical Reporter.*

QUININE AS A PREVENTIVE OF MALARIAL FEVER.—Dr. O. White, in a report to Gen. Ripley (of the late Confederacy) in regard to the "health of several encampments on James's Island and in St. Andrew's Parish, and also upon the prophylactic virtues of quinine against country fever," says: "Of the prophylactic virtues of quinine against malarial impressions, it may be asserted with confidence, that fortified with that wonderful drug none need fear venturing at any time into the heart of our low-lands in summer—inhaling with impunity its deadly miasm. Abundance of evidence can be brought to prove this assertion. This reliance in its virtue to resist malarial disease is unlimited. Many have lived protected by it for ten years or more, spending summer after summer in the sickliest regions."

Dr. Barker and the Government members of the Niger expedition, being abundantly supplied with quinine, encamped with safety upon the banks of that fatal river for over twelve months.

The African explorers under Dr. Livingston, were preserved entirely free from the pernicious fevers of the climate, by the habitual use of quinine. Further evidence of the prophylactic virtues of quinine has also been afforded to many of the officers of the British Government stationed on the coast of Africa, in reports from the various stations collected and arranged by Dr. Alex. Bryson. The British steamer *Eliaia* steamed up the river Niger in July, ascended the river Chaddon, and returned to England without the loss of a single man—all owing to the proper administration of quinine The party included sixty, and the expedition was in the river 180 days; twice as long as the expedition of '42, which, unprovided with quinine, ended in so fearful a loss of life. Surely no further evidence can be needed to prove that the daily and proper use of quinine in malarious regions is capable of so modifying the system as to render it capable of resisting the deleterious influences of climate, and of protecting individuals from intermittent or remittent fevers.

The dose usually prescribed under such circumstances is from three to five grains, regularly taken every morning before breakfast.—*Nashville Journal of Medicine and Surgery.*

MALPOSITION OF THE KIDNEYS.—The following case of Malposition of the Kidneys is related in the *N. Y. Medical Journal*, by Dr. Jones H. Butler. On the 14th of November last, the body of a negro was brought into the dissecting-room of the University of Maryland; during the dissecting, the abnormal position was observed as follows: "The kidneys, instead of occupying the lumbar region, were found in the pelvic cavity. Both organs were united or fused into one, with a central line or raphé making a longitudinal fissure over the surface of them, better marked on the posterior than on the unterior part. In length, they extended from the lower border of the lumbar aorta downwards, over the promontory of the sacrum, to the middle of that bone—in all, five inches; and in breadth measured three and three-fourths inches. The ureters sprang from the pelvis, which occupied the central anterior part of the organs, and then passed off on each side, and emptied into the bladder on each side. The tumor formed by the kidneys could be readily felt by examining with the finger *per rectum*. The arteries supplying the organs were four in number. Above, a single large trunk came from the aorta, just at the bifurcation, immediately in front of the sacra media artery, passed downwards, and before entering the substance of the organs, broke up into five smaller branches; on the left side, two arteries came from the left internal iliac, near its commencement, and on the right side an artery passed into the organs from the right internal iliac." The patient died of pneumonia.

RUBEOLA WITH PECULIAR FORM OF ERUPTION.—John H. Cobb, aged 13, (under the care of Owen Daly, M.D., of Hull General Infirmary), was attacked with rigors on November 24th, and admitted on the 27th in a severe febrile condition; having scattered irregularly over the extremities numerous spots, or rather circular patches, varying in diameter from one-quarter to three-quarters of an inch, of a dusky red color, slightly pale in the centre, not elevated, fading, but not entirely disappearing, on pressure. Similar, but larger, patches covered part of the hands, and enveloped the ends of the fingers. His face was flushed; lips dusky; tongue dry and glazed; pulse 120, very feeble; respiration hurried and abdominal, without cough or coryza. He was ordered milk-diet, beef-tea, six ounces of wine, and a saline mixture.

During the following week, fresh spots, exactly similar in character, appeared daily; and the hands and feet were quite enveloped by confluent patches; but on December 1st, the lower extremities were covered by a mottled rash like ordinary rubeola. This was more general on the following day; on the evening of which it began to fade, and rapidly disappeared. Desquamation of the cuticle followed, as extensive as in scarlet fever, the palms and palmar aspect of the fingers being quite denuded. His general condition steadily improved almost from the time of admission, and on December 20th he was discharged convalescent.—*British Med. Jour.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—TEPHENS Y CA.

New York, July 15, 1867.

TEACHERS' CONVENTION AND THE EXTENSION OF LECTURE TERMS.

THE circumstances attending the adoption of the resolution concerning the period of study, by the Convention of Medical Teachers, at Cincinnati, carry with them no small amount of significance. When the original proposition was put, that the term should not be less than three years, it failed to meet with general favor; and the unanimity with which the amendment of Prof. Gross, of Philadelphia, was passed, conclusively proved the importance which was attached to its further extension. The proposition coming, too, from a gentleman long engaged in public teaching, and associated with one of the first medical institutions in the country, is an earnest of the good faith and laudable desire of all those particularly interested in the advance of medical education. The origin of the motion, then, is unexceptionable; and the motives, it must be admitted, were as laudable as the necessities of the case are imperative. The probability, however, that it will be generally adopted is not so certain as we might expect. The main obstacle that we opine will be urged against it will be the conflicting interests of the several smaller schools. Many of these latter institutions, catering to the popular desire to manufacture doctors in a hurry, base not a small amount of their patronage upon the possibility of crowding very much learning into a small space of time; and while they make a show of many advantages, which are peculiar to themselves and the localities in which the institutions may be, give the students to understand that time is of the least importance. Such schools will doubtless strongly object to this movement, and will set up the cry that an unfair advantage is taken of their established rules, and that, consequently, no body of men have a right to dictate to them concerning a change so fundamental and so damaging to their patronage. But, after all, this resistance cannot but be short-lived, and those who are determined to hold out against the measure must inevitably, in the course of time, cease to exist. If, then, the resolution does no more than this—lessening the number of our small one-horse institutions—it will ultimately be the first step in the advancement of our college standard, and take the edge off the sneer with which our "manufactories of doctors," so called, are referred to by transatlantic medical men.

We have no doubt that the plan of extension will meet with the approval of the majority of students. It only is necessary to make a start with the coming fall to insure its success, and if but a few of the larger institutions would do this, they could sweep everything before them, and compel the smaller ones to follow their example. This is the only way a beginning can be made; the adoption of resolutions by a convention of never so respectable and honorable men, avails nothing, unless there is a proper spirit and determination behind to enforce them. The experiment can hardly be considered a dangerous one, as it is but a small increase of time compared with what the majority of our students are accustomed to spend in our colleges; the only essential change being the actual enforcement of such an attendance as to time, as shall be necessary to entitle them to final examination.

Another good effect of the adoption of compulsory measures in this respect, would be the prevention of the miserable system lately so much in vogue among many with the plea of limited time, of crowding two full courses into a year, by attendance during the summer months upon other institutions. While making this statement we are perfectly aware that it is the intention of these colleges to exact the legal requirement of three years' study in the office of a practitioner of medicine; but all who are even indirectly connected with these schools know full well that it is as easy to procure a certificate of the requisite amount of study as it is to get one of good moral character. This may be true of any college, or under any system of management; but we claim that it is more especially so in connection with the practice to which we allude.

As the question now stands, the length of time allotted to studies is all that can reasonably be asked for. It is now only enjoined upon the student to attend three full courses of lectures, and there is left to him a year to prepare himself for attendance at college. If, besides this, he be fortunate enough to reside in proximity to the school, he can spend not a little of his time in attendance upon such of the lectures as may agree with his preparatory studies.

The wording of the third resolution implies that it shall be obligatory on the part of the student to attend three full courses of lectures before he shall be entitled to receive his examination for a diploma. The difficulty in carrying out such a compulsory measure will be by no means great, and, practically speaking, there can hardly be any impediment at all to its general adoption for, as we have already intimated, there are not only a majority of the students who will attend in any event on lectures, but a great number consider it a privilege to remain connected with the college three terms in-

stead of two. All sensible candidates for a degree are well aware that their chances for success at the final examination are proportionately increased as they lengthen their term of stay beyond the time allotted; and to those who are in too great a hurry to do this, it does not, as far as any good to the profession is concerned, matter much whether they can graduate or not.

As regards the length of each course—that of five months—we are not much better off than we were before, save the naming of that period as the minimum. The larger colleges have almost to a single one adopted this as the standard, and, we are glad to say, by the establishment of summer courses, seem inclined to do more, so that there need not be on their part any change. But to those schools who have of late been curtailing their time and increasing their professors, the matter will be certainly somewhat different, and may seriously interfere with those pet little plans which they may have formed for making money easily, and having a decently large class of students. But we may say of these institutions as we have said of the students who attend them, that the profession can get along profitably without either. In fact, if the changes spoken of can fairly be inaugurated by responsible schools, so that the smaller ones are compelled to follow the example, one of two effects will follow: either very many of the smaller schools will be forced to raise their standard to the level of their leaders, or else pass out of existence altogether for the want of even a meagre patronage which may enable them to drag out a miserable and pitiable existence.

There is no question but that the medical mind is prepared for the extension of the term of study, and that the colleges that second the endeavor of the Convention of Medical Teachers will be appreciatingly rewarded by the patronage of the best class of young men, and the chances of a continued increase in attendance will be commensurably great in accordance with the spirit with which the intentions are carried out. As regards the increased expenses of board, etc., which such an attendance would involve, all we have to say is, that it would be too trivial to many to be weighed at all in the balance of expediency; and the number of those dissatisfied students who would complain of poverty would be very much decreased, when they discovered that they were compelled to spend the amount of time required, or else be deprived of a chance to obtain their examinations.

There does not seem to be much doubt but that the metropolitan schools will adopt the plan, their intention being foreshadowed in the inauguration of their summer courses; but as to the others, we must be patient and wait.

Thus far we are free from any of the epidemic influences of cholera. There have been but a very few sporadic cases reported up to the time of our going to press. The opinion of distinguished sanitarians is to the effect that the city and suburbs will in all probability escape the ravages of this dreadful scourge. But in view of this comfortable assurance of safety, it becomes a matter of no small concern to consider the probability of our being equally fortunate with reference to Yellow Fever. Everything, however, is being done by the authorities to prevent its entrance into our port, and we hope that their endeavors will be crowned with that success which they deserve.

We would especially commend the remarks made by our Philadelphia correspondent, in regard to the difficulties attendant upon reporting, to many of those gentlemen who are so willing to talk and so unwilling to have their remarks published. His views concerning the matter will certainly be endorsed by those of our readers who desire to be kept informed of the doings of our different scientific bodies.

Reviews.

On Railway and other injuries of the Nervous System. By John Eric Erichsen, Fellow of the Royal College of Surgeons, Prof. of Surgery and Clinical Surgery in University College, etc., etc. Philadelphia: H. C. Lee. 1867. 8vo. pp. 103.

The number of cases of railroad injuries that are constantly occurring, and the number of instances in which suits against railway companies are being multiplied, invest the particular subject treated of by Mr. Erichsen with a great deal of importance. The professional mind has of late, in regard to these cases, become tinctured with much of the prejudice that has belonged to juries, and physicians have persuaded themselves that many of the effects of shocks complained of by patients have no foundation in fact, and are only trumped up by the injured one for the sake of obtaining heavy damages. To such surgeons this little work particularly appeals. The subject of injuries to the nervous system, by comparatively trivial shocks, directly or indirectly inflicted upon the spinal column, is very lucidly discussed; and the reader, on perusing the work, will not fail to be convinced of the frequency, as well as danger, of these occurrences. The author assumes that a shock may be received by a mere concussion of the body as a whole, without giving any evidences of external injury, and ultimately lead to organic disease of the membranes or cord itself. The cases which the author cites in proof of this, and the deductions which he draws from them in regard to diagnosis and prognosis, are peculiarly valuable to the medical jurist. This particular part of the subject of railroad accidents has not been treated of in any work within our knowledge; and it is a fortunate thing for the profession that the distinguished London surgeon has added the weight of his name to the elucidation of such an important and interesting class of affections.

Chemistry of the Farm and Sea: with other Chemical Essays. By Jas. R. Nichols, M.D., Editor Boston Journal of Chemistry, Member of Mass. Institute of Technology, etc. Boston: A. Williams & Co. 1867. 12mo. pp. 122.

The work before us is calculated for the instruction of the public in matters of science, and will serve the purpose for which it was written. The author is well informed on all the subjects that he discusses, and has a faculty that will be appreciated by the general reader of making things clear and intelligible. It is a very

suggestive and edifying work to any who have not given attention to the applied sciences; but to the majority of our readers it would be simply as an old story told anew.

WHY NOT? A Book for every Woman. The Prize Essay to which the American Association awarded the Gold Medal for 1865. By HORATIO ROBINSON STORER, M.D., of Boston, Surgeon to Franciscan Hospital for Women, etc., etc. Boston: Lee & Shepard. 1867. 16mo. pp. 99.

THIS essay, we are glad to learn, has within the short space of a few months advanced to a second edition, giving unmistakable and gratifying evidence of its acceptance by the community.

TREATMENT OF PNEUMONIA with the Preparations of Veratrum. By DR. KOCHER, etc. (Behandlung der Croupösen Pneumonie mit Veratrum präparaten. Von Dr. Theodor Kocher, in Bern. Würzburg. Druck und Verlag der STAHEL-SCHEN, Buch und Kunsthandlung. 1866.)

DR. THEODOR KOCHER, of Bern, presents us with a work of ninety-four pages, on the "Treatment of Pneumonia by the Preparations of Veratrum." Considering the probability of the disease ending favorably in a certain time, if left to itself, Dr. K. thinks we should still seek for remedies which will *abort* it.

The book is mostly composed of the results, histories, and treatment of, and reflections on sixty cases of pneumonia, where veratrum was used, under the care of Professor Biermer, in Bern. The resina veratri viridis was given usually in $\frac{1}{8}$ grain doses, hourly, until four pills had been given; then stopped to avoid sickening. The pulse and temperature often fell very quickly. The mortality of these cases is stated at 8.3 per cent. The average duration of treatment five days and twenty-one hours. The veratrum is supposed to affect only the fever *directly;* it lowers the pulse and temperature. The crisis is only caused in the first twenty-four hours of the disease, near the time of the spontaneous cessation of the fever.

The indirect influence on the local process, rather than the avoidance of the consumption by the fever, causes the favorable statistics of the veratrum treatment. The remedy is contra-indicated where the fever is slight, or where the patient is so weak that he may not be further reduced. When not too much debilitated, and in drunkards, stimulants may be simultaneously employed. The necessary quantity of veratrum must be given in a short time, and the medicine stopped as soon as nausea or lowering of the pulse or temperature occurs.

THE CURABILITY OF PHTHISIS PULMONALIS. Examined Historically, Pathologically, and Therapeutically, etc. (Die Frage über die Heilbarkeit der Lungen Phthisen, Historisch, Pathologisch, und Therapeutisch, untersucht von DR. JOHN BAPT. ULLERSPERGES. Würzburg. Druck und Verlag der Stahel-schen Buch und Kunsthandlung. 1867.)

THIS is a book of 275 pages, on "The Curability of Pulmonary Phthisis." The disease is said to be the cause of about one-fifth of all deaths, and of about one-half of those occurring between the ages of fifteen and thirty years. The first part of the book is occupied with the relation of cases that have terminated in cure, under different methods of treatment.

The author seems to have drawn his material from various sources, French, German, English, and Russian authors being quoted. Indeed, Dr. U. speaks as if his work were intended as a resumé of all that has been written on the subject, with the addition of observations of his own.

The most important part of the treatment is considered to be prophylaxis. "It is easier to prevent phthisis than to cure the slightest case of it."

Among the prophylactic means is mentioned residence at the sea-shore. This is useful in chronic phlogosis of the pulmonary mucous membrane, with tubercle threatening or just deposited, but is injurious in the stage of softening.

Another important point in prophylaxis is the avoidance of marriages between relatives or tuberculous persons. The choice of climate for the residence of tuberculous patients has always been considered very important, and the advantages of the different places recommended are here very extensively discussed.

Among the methods of treatment proper, those by nebulized fluids, iodine, cod-liver oil, raw meat, and alcohol, etc., are mentioned at some length.

Reports of Societies.

N. Y. PATHOLOGICAL SOCIETY.

STATED MEETING, APRIL 24, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

OVARIOTOMY, EFFECT OF INTRA-ABDOMINAL LIGATURE.

DR. CUTTER presented the remains of the ovary of the patient upon whom he had operated a few weeks ago. The case was that of the old lady reported at the last meeting, who died the fourth day after the operation, from exhaustion. He desired simply to exhibit the specimen as an illustration of the effects of intra-abdominal ligature. There was found on post-mortem examination, union throughout the whole extent of the wound, and, with the exception of a little bloody serum in the cavity of the abdomen, nothing abnormal was noticed. The point at which the ligature was applied to the pedicle was considerably shrunken, so that the ligature itself, while being partially encysted, was quite loose; but what at first sight seemed remarkable, was that the vitality of the pedicle beyond the ligature was preserved. This he thought was in part due to a connecting band from the proximal side to the pelvis.

DR. SANDS thought that the latter circumstance could be explained by the recollection that a very large vessel was tied in a very thick pedicle, and that the subsequent shrinking of the tissues in the neighborhood allowed the artery to expand sufficiently to give the necessary supply of blood to the parts beyond. He also believed that the ligamentous band connecting the pedicle with the pelvis had considerable to do with the preservation of the life of the distal end of the ligated portion.

DR. POST presented a specimen of disease between the first and second phalanges of the finger of a child two years old. The disease existed about a year, and the finger at the affected point was so enormously swollen that the doctor was inclined to believe that the bone was affected. On removing the member by amputation, the said enlargement was found, much to his surprise, to be confined mostly to the soft tissues. The articulation itself was the seat of caries.

WELL DEVELOPED MAMMARY GLANDS IN A MALE.

DR. WATTS, Jr., exhibited an Irishman, fifty years of age, who was malformed in rather a remarkable manner. In the first place, he had a pair of well developed mammary glands, and secondly, his penis was only about three-quarters of an inch in length, and the different parts of the organ were proportioned in size. The subject of these phenomena was fifty years of age, was one of thirteen well formed children, had

been married, and was enabled to have sexual intercourse and seminal emissions. He never had any children. Since he has become a widower, he is not unfrequently troubled with libidinous dreams. There was no blood relationship between his father and mother. The mammæ had all the appearance and feel as if made up of lacteal tissue.

TUBERCULOUS DISEASE OF LIVER.

Dr. Lewis Smith exhibited a liver removed from a female seventy-six years old, who died of old age. In the left lobe of the organ was situated a circumscribed whitish granular cheesy tumor, having very much the appearance of a tuberculous mass. He was inclined to believe that the appearances were due to an hydatid cyst, which had undergone a distinctive metamorphosis. In confirmation of this view he quoted some remarks from Frerich's work on the liver. No microscopical examination sufficiently thorough had been made, for the purpose of finding the characteristic hooks of the echinococcus.

On motion, Dr. Smith was requested to make such an examination and report the result at the next meeting.

Dr. Smith next presented a lung taken from a child, who died at the nursery, Blackwell's Island. The patient was ten months old, and had symptoms of pneumonia twelve days preceding its death. The seat of the pneumonia was detected by auscultation and percussion; there was dulness on the right side and below the scapula, and some dulness, less in degree, on the left side. When this child had been sick about six days, it began to have a croupy cough. At the same time there was upon the left side considerable inflammation of the cervical glands and neighboring cellular tissue On examining the fauces there was noticed a considerable deposit of lymph upon the fauces, and a diagnosis of diphtheria supervening on pneumonia was made. The child finally died of debility. On post-mortem examination the faucial deposit was granular in appearance, and under the microscope revealed the fibrillæ, as well as the pyoid corpuscles. This deposit extended as far down as the rima glottidis. One point of interest was the impossibility of inflating that portion of the lung which had been the seat of pneumonia. He remarked that Bouchut had stated that in the first and second, and sometimes even in the third stage of that disease, the infantile lung was inflatable.

WAS IT A FRACTURE OF THE ACROMION?

Dr. Hamilton presented a scapula which had been sent him by a gentleman, asking if there had been a fracture of the acromion process. From an examination of the specimen he was enabled positively to decide that it was not. This conclusion was based, in the first place, upon the fact that the disjunction was in the situation of one of the epiphyses of the acromion. In passing, he remarked that the acromion process was formed of two epiphyses, the shorter one being very frequently found separated, and the other less often. It was this last one which, not being united, was mistaken for a fracture. In the second place, there was no displacement; and, thirdly, it had a perfect capsule. This last argument was used with the full knowledge that such a condition might exist after some fractures, but only in such as were kept constantly in motion. Lastly, at the seat of the separation there was an elevated crest or margin, acondition which was never met with in a case of fracture with a capsule. The patient was a male, seventy years of age, and a thorough examination of the skeleton failed to detect any other epiphyseal separations; an argument which, by-the-by, was used in support of the supposition that the lesion exhibited was a fracture.

EPITHELIOMA OF PREPUCE FOLLOWING CONGENITAL PHYMOSIS.

Dr. Hamilton next exhibited an epithelioma of the prepuce which he had removed a few days ago. The patient was thirty-one years of age, and had a congenital phymosis, and had never been able to retract the foreskin. About the latter part of last January he received an injury of the penis, in consequence of which it became swollen. About a month ago the integument in front of the extremity of the prepuce became thickened, and cracked. Instead of an ulceration at the latter point there was disclosed a fungus the size of a ten-cent piece, which was flattened, and had a firm and indurated base.

He stated that this was the seventh case of epithelioma of the penis upon which he had operated; and of these, five were examples of congenital phymosis. He regarded that simple circumstance in itself sufficient reason why we should make haste to operate upon all such cases in early life. He had observed that in all the cases it seemed to have commenced in the integument of the prepuce. In five of the seven it had already involved the gland; in all it seemed to have commenced in the prepuce. In six of the seven he had amputated more or less of the penis; in five of the seven had made amputations primarily, and in the remaining sixth the operation of cutting away the phymosis was extended to amputation on account of finding the penis diseased. In reference to the amputation he remarked that in all save the last he had used the knife and had been bothered with secondary hæmorrhage; in the last case, however, the écraseur was employed, and no such unpleasant results followed. From the satisfactory behavior of the stump in that instance he had made up his mind to prefer the écraseur hereafter.

Dr. Finnell presented a cæcum removed from a person who died of heart disease. The appendix vermiformis was found perforated with an alvine concretion, and adherent to the cæcum. No history of the case was obtainable.

Adjourned.

Stated Meeting, May 8, 1867.

Dr. Henry B. Sands, President, in the Chair.

INCISED WOUND THROUGH HEART.

Dr. Thomas C. Finnell presented, on behalf of Dr. John Beach, a heart taken from a man who was stabbed with a butcher-knife on the left side, below the nipple. The weapon entered the thorax, between the sixth and seventh ribs, pierced the pericardium and the left ventricle of the heart, cutting the apex across. He lived long enough to descend a flight of stairs, when he fell and expired. The lungs were much compressed with blood that filled the left pleural cavity.

DEATH PRODUCED FROM ABORTION.

Dr. Finnell presented another specimen, on behalf of Dr. Leo: the generative organs of a woman thirty-nine years of age. She was in the eighth month of her pregnancy, and tried to produce an abortion on herself by various means. She used a glass chimney as a speculum, before a mirror, and irritated the uterus with a whalebone, long hair-pins, etc. However, she did not succeed, and went to an abortionist in Amity street, who had performed a similar operation on her twice before. She was delivered of a child on April 4. Dr. F. saw her first on April 21, and diagnosticated

uterine phlebitis. Pulse was 130, and kept the same way for ten days. She died on the nineteenth day after the operation of pyæmia. She had marked chills twice a day a short time before her death, not much fever, but severe pain and vomiting.

Post-Mortem.—The uterus was much enlarged, and presented a dark appearance; the attachment of the placenta could be distinctly seen. On the left side of cervix uteri was an extravasation; abscesses were found in both ovaries, and matter exuded, on cutting into them. The veins were filled with coagula. The vagina had a small discoloration; the uterus was almost gangrenous, discharging a thick muco-purulent matter, of a yellowish color. There was no peritonitis, nor any other signs worthy of note.

ANEURISM OF THE RIGHT SUBCLAVIAN ARTERY.

Dr. Markoe presented the heart, aorta, and its principal branches, taken from the body of a man about fifty years old. The patient was a dry-goods clerk, married, and regular in habits, though not of robust health. About the 1st of January last he began to have occasional attacks of dyspnœa, for which he consulted Dr. Hunter, who recognized aneurism of the right subclavian artery, and sent him to the clinique of the College of Physicians and Surgeons. The aneurism was discovered about the size of half an egg, situated just where the artery emerges from the scaleni. The pulsation was very distinct and forcible, the tumor swelling out to twice its size at every pulsation of the heart. The pulsation of all the larger arteries of the neck was very active, though no other aneurismal dilatation was noticed. The same energetic pulsation was observed in the iliac and femoral arteries. The man's general appearance was pale and anæmic, though he suffered no pain, and indeed presented no symptom of disease except the occasional attack of dyspnœa, which most commonly came on at night. There was a marked bruit (de soufflet) along the course of the aorta, but no dulness in any part of the chest, which would indicate internal aneurism. The bruit was thought from its softness to be anæmic.

It was noticed that the pulse on the left side was very faint and small as compared with that of the right side. This paroxysm of dyspnœa increased gradually in frequency and in severity, and he finally succumbed on May 5.

The heart was enlarged, and its tissue had undergone some degree of fatty degeneration. The aortic valves were thickened, corrugated, and at their base calcified. The aorta was largely dilated, atheromatous and calcified. The innominata was natural in size, but somewhat irregular and puckered on its surface. The right carotid was thickened in its whole course, so that its calibre was diminished. The right subclavian was of natural size, till it emerged from the scaleni, and there presented a sudden dilatation, apparently of all the coats, which formed an aneurism, now much smaller than it appeared in life, entirely empty of blood, and occupying about an inch and a half of the vessel. Beyond this aneurism the artery suddenly resumed its healthy condition. The left carotid was slightly dilated, and the left subclavian, commencing beyond the thyroid axis, was so contracted that, at one point, its calibre was diminished at least two-thirds. All these dilatations were of the fusiform variety, and embraced all the coats of the artery. That the arterial coats were diseased was manifested not only from their thickened and irregular surfaces, but from the fact that the surrounding tissues were morbidly adherent to them at every point, making dissection difficult; a condition which would pretty certainly make a difference in the facility and success of any operation to be performed on them.

Dr. Markoe remarked that he had watched this case with unusual interest, as he had at one time hoped he might be able to do something for its relief by an operation. He did not believe that it was sound surgery ever to put a ligature on the subclavian in the first part of its course, as there was not room for a clot to form, on account of the return current through the vertebral, and in every case when death had occurred from hæmorrhage it had been from the distal side. He had determined in his own mind, if ever the opportunity offered, to apply in a similar case a ligature to the innominata near its bifurcation, and also one upon the common carotid, just above its origin. He believed that this was the only operation on subclavian aneurism which promised success. Dr. Mott, in his history of the operation on the innominata, makes the same suggestion.

GRANULAR DISEASE OF THE KIDNEY.

Dr. Noyes exhibited a kidney, which was brought to him by a country practitioner. The specimen was particularly presented to show that with the aid of the ophthalmoscope a correct diagnosis can be made of Bright's disease. He saw the patient in the latter part of January. The patient was a farmer, 49 years old; the last four months he had complained of impaired sight, loss of appetite, and an increasing weakness. Dr. N. found retinitis, an albuminous urine, and made a positive diagnosis of morbus Brightii. There was no heart disease.

Dr. Sands remarked, that he had examined a patient with albuminuria two months ago and also found no heart disease.

Dr. Noyes found in the case under consideration no ecchymosis in the retina, which is always seen in cases associated with heart disease.

ANEURISM OF CŒLIAC AXIS.

Dr. E. C. Seguin presented a specimen, which was removed from the body of a sailor, 36 years of age, who died on the 3d of May, in the New York Hospital. On admission, April 30, he gave the following history:

Two months previously he began to suffer from rheumatic pains in the legs, arms, and left side of body, which pains had been decidedly nocturnal. The pain in the abdomen he located in the epigastrium, going through to the lumbar region, around the left hypochondriac space; and he described it as very sharp and severe. He stated that until one month ago he never had any dyspnœa; that he never had suffered from acute rheumatism, or received any injury. Five years previously he contracted syphilis, and since has had skin and throat secondary symptoms. He had continued the duties of an able seaman during the first month of illness, but had after that time taken to his bed. He noticed about three weeks ago that lying on his back caused increased pain.

On being examined in the ward, he was found lying upon his right side, his knees drawn up, his face being pale and expressive of pain and anxiety. The tibiæ and ulnæ were found swollen and tender; and the glands about the elbows and neck enlarged. Great tenderness was found in the abdomen over the left hypochondriac region, the epigastrium, and over the lower ribs near the spine. In the epigastrium a pulsation was distinctly visible, and on applying the hand a little firmly, a distinct aneurismal thrill was perceived. Auscultation showed the heart and arch of aorta free from abnormal sounds, but about an inch above the

ensiform cartilage in the median line, a loud, hard systolic murmur was heard. On tracing it downwards, it appeared loudest at the apex of the sternal appendix, getting fainter below that point until lost midway between the umbilicus and pubes. In the back no true murmur was to be found, but a sort of shock or "thud," with the systole of the heart, was audible over the tenth dorsal vertebra. No aneurism was to be found in any of the superficial arteries. A careful examination of the urine failed to reveal albumen or casts.

The diagnosis was made of aneurism of the aorta in the neighborhood of the cœliac axis.

Preparations were made to put him upon the postural plan of treatment, and meanwhile morphia was given hypodermically to allay the pain. Unfortunately the issue was nearer than anticipated; on May 3, at 1 P.M., the patient put his hand upon the tumor and fell into a fatal syncope. No imprudent movement was made previous to this.

The autopsy was made 24 hours post-mortem. The abdominal cavity contained an enormous quantity of blood; 3¼ lbs. of clot, and 4 lbs. of liquid blood. The heart and lungs were healthy. The aorta was removed as far as its division in the pelvis. The valves were healthy, but the vessel was extensively atheromatous; in the arch anteriorly an aneurismal pouch had commenced to form. Lower down opposite the cœliac axis, no dilatation was to be found; the branches of the vessel arising in a normal manner. But on tracing out these branches, a large aneurism was found connected with the cœliac axis proper, adherent on the left to the supra-renal capsule, on the right to the lobus Spigelii of the liver, and above intimately connected with the diaphragm. The branches of the axis escaped from the lower part of the sac, whose walls, ¼ of an inch thick, were rough internally, made up of very old layers of fibrin; the rupture having taken place (an opening ¼ inch across) at the anterior edge of the adhesion with the liver. The sac contained but a little liquid blood and clot. The remaining abdominal vessels were healthy.

The spleen, liver, and kidneys were healthy. The physical signs in the case are remarkable, and might have been sufficient for the making of an exact diagnosis. There was no doubt as to the weight of the aneurism, and dilatation of the aorta might have been excluded on account of the absence of bruit in the back. It is very remarkable that the patient had never suffered from vomiting or any disorder of the digestive organs excepting constipation.

The Society then went into executive session.

EXTRAORDINARY OBESITY.—A woman named Hogan, wife of a comfortable farmer living at Kilmastulla, Ireland, died recently from obesity. Mrs. Hogan, in her youth, showed symptoms of attaining more than ordinary proportions, and she continued to increase in size until, at the time of her death, she had reached the extraordinary weight of forty-eight stone (672 pounds)! She was, for the last few years of her life, scarcely able to walk, and for some time past entirely confined to her bed.

HOOPING-COUGH.—A correspondent of the *Lancet* says that he has very often succeeded in cutting short the paroxysms in this disease by applying a blister or sinapism to the nape of the neck or the shoulders of the little sufferer. This may be repeated as occasion may require. It has, of course, no effect upon the bronchitic and pneumonic complications.

Correspondence.

THE PUBLICATION OF REPORTS OF SOCIETIES.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—With the advent of warm weather in earnest, many of our patients are departing for the sea-side, the springs, the mountains—anywhere out of the heat, and out of the bustle of the city; and some of the unfortunate can't-get-away doctors are parting for a time with their domestic endearments to lead a bachelor life in the city, until the season becomes suitable for the return of their families. Summer courses of medical instruction are suspended, clinics closed, societies adjourned; what matters of professional interest are there to write about? In the want of something to chronicle, let me chat to you a bit about *the publication of Reports of Societies in medical journals.* This is a subject which during the past year has exercised some of the members of the profession here a good deal, and culminated at a business meeting of the County Medical Society, a few months ago, in a resolution prohibiting the report of their discussions in medical journals, whether by professional reporter or member of the society, without certain official sanction, and the individual supervision of those members participating in the discussion. So, sir, unless your correspondent has influence enough in the fall, to have this resolution, or motion, or whatever it was, reconsidered, you will have to strike from your columns the reports of the Philadelphia County Medical Society.

Now, sir, what are the objections urged against the publication of the reports? That they are not official, that they are often incorrect, or to use an offensive phrase, "garbled," and that they are not subjected to the revision of the speakers.

Now, sir, in my opinion, the report of a discussion, such as has been contributed at times to your columns, is not intended as an official transaction, nor as a substitute for such; it is simply a record of such comment as certain subjects call forth at the time. Every one who reads the Journal knows exactly the manner in which discussions on special medical subjects take place, and does not expect the language or precision of an official promulgation. He knows that a paper is read by a member, or a subject introduced extemporaneously; that comment is elicited from those who listen; that pertinent matter overlooked by previous speakers is referred to by succeeding ones; that peculiar views are enunciated, and those already advanced endorsed or combated; that sometimes speakers arise, occupy a good deal of time without bringing forward any new idea, or merely reiterate what has already been brought forward more distinctly; that others branch off from the subject and give valuable dissertations on extraneous topics; that later in the discussion some one reviews the entire debate; and finally, when all that have desired to express their views remain silent, the discussion closes.

There is a good deal of information to be gained from these discussions; practical experience is narrated which would never be otherwise recorded; the accordance or non-accordance of theories subjected to the practical test—and naturally a medical journal is anxious to avail itself of whatever value arises therefrom; and hence the prominent place usually accorded to Reports of Societies in such journals.

To print in full a paper which may have taken an hour or more to read, to print in extenso the remarks

that it may have called forth, is the province of those having in charge the publication of the official Transactions of the Association.

The province of the Medical Journal is to mention the subject, present a short synopsis of the paper, or describe its tenor, indicate the nature of the discussion which ensued, and call attention to anything new or valuable that may have been elicited in consequence. This is to be done to the best of the ability of the party to whom the matter may be intrusted by his editor, and a certain amount of discretionary responsibility must rest upon that individual, as to how much, and what much of the paper and discussion is to be reported. A full report is always too bulky for the pages of a medical journal, and would often, perhaps, command perusal less frequently than a synopsis; and then many societies claim equal representation.

To present for individual revision the copy of the remarks made by those taking part in the discussion is irksome, for many reasons. Not so much on account of a change of language which some might desire to substitute, but because of the impossibility of pleasing every individual as to the particular report of his own remarks. One gentleman would re-write the whole thing, inserting many things which escaped his attention during his own participation in the debate, and perhaps nullifying entirely the value of the remarks of some later speaker, who had been induced to take part solely because such topics had not been alluded to before. Another gentleman would send his copy back re-written, occupying three or four times the space that had been allowed for him, with a polite note, that he would prefer his remarks to be published as re-written by himself. Another gentleman would keep his copy three, four, or twelve weeks after all the rest had been returned, and thus publication would be delayed, the editor annoyed, and the reporter worried. Then, after all was ready for the press, some matter would have to be cut out, and how to do this without offending those who had gone to the trouble of correcting the copy of their own remarks, would puzzle even those most easily offended.

Where a Society publish their Transactions regularly, in pamphlet, or in some certain medical journal, all these matters are attended to, and there is a completeness about the production that would be sought for in vain in a journal account. In the latter, elegance of diction is not often looked for, because but few possess such extemporaneous ability; methodical consideration of the subject is expected only from the party introducing it, because it has been his duty to prepare himself; those following, often speak on the spur of the moment, and their remarks lack the finish that would pervade an essay emanating from their study; so that it is necessarily inferior in every respect to an official record. Yet for that reason it need not be incorrect, because it records something a gentleman did say, but did not mean to say; nor need it be garbled because it has selected from a gentleman's remarks those considered most novel or most instructive, or changed the record into narrative, in order to economize space.

Besides, the record of a Society meeting, as usually reported, without referring the copy to the speakers for revision or approval, may prompt participants in a discussion to more care in their remarks, to a habit of coming to the meeting booked up on the subject, so as to avoid the possibility of saying what they did not mean to say. But, where a good deal of latitude is to be allowed in re-arranging remarks, interpolating what was forgotten, etc., less attention will be paid to the subject at the time of speaking by those who would depend upon a future opportunity to correct inadvertencies or supply deficiencies; and thus the discussion would not then be faithfully reported.

I trust that those who have virtually secured for the present the exclusion of reports of the Philadelphia County Medical Society from the pages of the medical press, will be led to adopt views more consonant with the liberal catholicism of the profession, that their colleagues elsewhere may not be deprived of the chance of occasional participation in the crumbs of information which are sometimes dropped from the deliberative table of that body.

Messrs. Lindsay & Blakiston, medical publishers, of this city, have moved their salesroom from the ground floor of their establishment to the second story, which has been neatly fitted up for the purpose; and it is said to be their intention to devote themselves to the publication of works on medical subjects more exclusively than heretofore. Their recent editions of Aitken's Practice, of Waring's Therapeutics, and of Cazeau's Midwifery, have been introduced into the U. S. Army. They announce the reception of the third part of Trousseau's Clinique Médicale, and the appearance of a new edition of Harris's Dental Dictionary; of Taft's Operative Dental Surgery; and of their Physicians' Visiting List for the coming year.

Yours truly,

C. J.

Philadelphia, July 6.

NEW METHOD OF "COMPLETING"

THE REDUCTION OF OLD DISLOCATIONS OF THE SHOULDER.

TWO CASES REPORTED.

By DR. M. C. CUYKENDALL, of Bucyrus, Ohio,

IN A LETTER TO DR. HAMILTON.

To the Editor of the Medical Record.

Dear Sir:—The manœuvre adopted by Dr. Cuykendall, in his last attempt, was original and ingenious, and is, I think, worthy of a notice in the Record.

Yours truly, F. H. Hamilton.

The following is the report of the case:

Prof. Hamilton, 64 Madison ave.—*Dear Sir*—Believing that cases like the following interest you, I beg leave to report it. I would have done so at the time I treated the case, but I saw a notice that you were about publishing the third edition of "Fractures and Dislocations," and I deferred it. Since I procured that work, and perused it in part, I have concluded to send you the report, which is as follows:

Mr. V. Seaton, of this county, aged 62 years, a farmer, of spare habit, fell from his horse, and dislocated the right shoulder, forwards, under the clavicle.

An Irregular, who saw him a few minutes after the accident, pronounced it a sprain, and advised cooling lotions. Seven weeks afterwards, he applied to me, when the head could be distinctly felt, and seen, in the sub-clavicular fossa.

I made three attempts, of one hour each, at reduction, with Jarvis's Adjuster, assisted by Drs. Meyer and Keller, of this place, and failed, as I believe, because we only made extension downwards, and the axilla pad, from its shape, pressed too hard upon the edges of the pectoralis and latissimus dorsi muscles, although we filled the axilla as well as we could. The patient was fully under chloric ether each time, and before applying the adjuster, the arm was forcibly rotated, and moved in different directions some fifteen or twenty minutes. There was an interval of twenty-four hours between each trial, and, after the third time, the parts

became so sore and painful, that the patient decided that he would have nothing further done. However, twelve days after, it being sixty-four days after the dislocation, he consented to another trial, and this time, assisted by Dr. Richey, of this county, I succeeded.

The patient was laid upon the floor, the double pulley secured to the wrist, and Skey's knob in the axilla, and put fully under the influence of chloric ether, and extension applied directly downwards, breaking up many adhesions, but not reducing the bone. I then secured the opposite arm, and made extension at right angles for some time, but, not succeeding, I secured the scapula with a band across the top, and made extension directly upwards, breaking up many and extensive adhesions, and, as I thought then, placing the head of the bone in its socket; but, upon removing the pulleys and bringing the arm down the head was found resting upon the edge of the glenoid cavity, and no extension, that I afterwards applied in any direction, did any apparent good. I, as a last resort, secured the pulleys above the elbow, the knob in axilla, flexed the arm, and made extension downwards and forwards, and when well extended I moved his body under the pulley ropes, so as to bring the arm forcibly across the breast, and then keeping up the extension, I had Dr. Richey place his knee upon the top of the scapula, and lock his fingers around the elbow, while I placed my knee against the elbow and locked my fingers around the top of the scapula, and directing the extension removed, we forced the bone upwards and outwards to its socket. During this last operation, the breaking of adhesions was perceptible, not only to Dr. Richey and myself, but also to the patient, who was then partially recovered from the effects of the anæsthetic. We had the patient under the influence of chloric ether four hours. His recovery was rapid, and he has perfect use of his arm.

This is the second case of *old* dislocation of the humerus, where I have succeeded in *completing* the reduction by securing the scapula and *pushing* the bone upwards and outwards, after having failed with *pulling*.

Should your time permit you to do so, I would be pleased to receive an acknowledgment of this, with your views.

I am, sir, very respectfully,

M. C. Cuykendall.

THE EFFECTS OF IMMERSION OF LUNGS IN ALCHOHOL IN RELATION TO THE QUESTION OF INFANTICIDE.

To the Editor of the Medical Record.

Sir—On the 19th ult. I was called to inspect three infants that had been found in a street ash barrel. Suspicion of infanticide being entertained, an autopsy was ordered by the coroner, the results of which I think are worthy of record. The bodies had the appearance of fœtuses of five, six, and seven months' growth, respectively. They had apparently been preserved in alcohol. The cords in each had been properly cut and secured. There were no unusual marks on the surface, and the presumption was strong from external examination that the bodies were those of fœtuses that had been kept in alcohol for exhibition.

The internal organs were somewhat hardened by the preservative fluid in which the bodies had been placed. The lungs had the appearance peculiar to fœtal life. Their condensed structure, small size and sharp edges of their lobes proved to my mind that they had not been ed.

Both lungs, with entire thoracic contents, were thrown into water and *floated buoyantly*. Large and small sections of lung acted in the same way. The small pieces were firmly pressed and still floated. A very small piece when squeezed with a great deal of strength was made to sink. The compression required to produce this result was far more than is necessary to expel air in ordinary cases when gas is generated from putridity.

The peculiar character of these lungs I think must be due to the effect of the alcohol upon them. Pieces of *liver* thrown into water floated just as the lungs did. The appearance of the organs was not such as is usually seen when decomposition has set in. There were no air vesicles on the surface, nor change in their internal structure nor fetid ordor. It is possible that the alcohol merely modified the putrefactive process, causing a very different change in the tissue from that produced by exposure to the air or water.

The lungs of the three bodies were subjected to the same tests with like result.

This peculiarity of tissues subjected to the action of alcohol, it appears to me, has an important bearing on medical jurisprudence. A case might occur where the body of an infant, in suspected infanticide, should be preserved in alcohol for a length of time before being subjected to post-mortem examination and the hydrostatic test make it appear that a still-born child had been born alive. It is true that we are advised before the application of this test to press the lungs thoroughly, but to expel the air the amount of pressure required in the lung subjected to the action of alcohol bears no proportion to that ordinarily used to free it from the gases of putrefaction.

Wooster Beach, Jr., M.D.

EXTENSIVE ADHESION OF PELVIC ORGANS, ETC.,

AND THE ACCOMPANYING SYMPTOMS.

To the Editor of the Medical Record.

Sir—I beg leave to offer the following account of the singular developments of a post-mortem examination recently made. The subject of this examination was a married lady, twenty-six years of age, without children. About a week prior to her marriage, in November, 1865, while residing in Chicago, Ill., she took cold during her monthly period, by sleeping in a damp room, which caused a suppression of the menses, followed in a few days by "inflammation of the womb." She was very dangerously ill, and her life was at one time despaired of. The ordinary symptoms of this acute disease gradually assumed a chronic form, and others of great severity and intractable nature were superadded. Thus she continued to suffer throughout the winter from an exhausting diarrhœa, from frequent and painful micturition, and from daily paroxysms of agonizing pain in her back and hips. By spring she was reduced to the condition of a skeleton, having lost 50 lbs. of flesh. Her weight in the fall had been 128 lbs.—it was now 76. Very naturally, she was thought to be "in a decline," and her disease was pronounced incurable by her attending physicians; their diagnosis being, "consumption of the bowels." It was not even thought safe to arrest the diarrhœa, "lest it should lead to a deposit of tubercle in the lungs." There also had existed for several years a grave disease of the *heart*, which, however, had not given rise to any urgent or painful symptoms. In this condition she was brought from Chicago in a "sick car," and reached her home in Suffield, Conn., April 12, 1866. A month

later she came under the care of the writer, having previously abandoned all hope of recovery, and having become quite averse to any further treatment.

From a careful survey of the case it was thought that her disease was *not* tuberculous nor constitutional, but *local*, and confined mainly to the pelvic organs. Upon examination the os and cervix uteri and posterior wall of bladder were found exceedingly sensitive and irritable, and patient could not bear the slightest pressure externally in the pubic region. As a state of chronic inflammation, with great irritability of these organs, is not uncommon in women, producing a train of distressing symptoms not unlike those of our patient (with the exception of the diarrhœa, which soon yielded to treatment), her case was not considered hopeless. Without going into details it is sufficient to state that by a dogged perseverance on the part of her very wilful doctor and most tenderly sympathizing mother, and with a patience *more than soldierly, because womanly*, on *her* part, in the use of fomentations, poultices, neuralgic liniments, plasters, &c., in the hypogastric and sacral regions, together with injections and suppositories per vaginam and per rectum, and various internal remedies (her extreme emaciation and debility forbidding the use of more efficient treatment by leeches, cups, and caustics), she was at length brought to a condition of comparative ease and comfort—suffering only from her evacuations, which at times were still very distressing. The persistence and occasional severity of these troubles sometimes shook my faith in my diagnosis, but never suggested any such extensive organic lesions as the sequel will show were found after death. The neuralgic pain in her back and limbs wholly subsided. She became very cheerful and hopeful, and by the 1st of August had gained 20 lbs. of flesh. She was at this time able to ride out, and some weeks later made a four days' visit to her sister, in Meriden, 40 miles distant: going and coming by stage and railway. Her monthly periods were never established, except by the occurrence of vicarious menstruation in the form of epistaxis, with generally an aggravation of all existing symptoms. Though subject to such ailments, she continued to improve till about the 1st of January, when, happening to take cold after a fatiguing day's labor (upon a *hoop skirt!*), she had an attack of acute rheumatism, which confined her to the bed three weeks or more. From this attack she never fully recovered, lost her appetite, never after sat at the table with the family as before. She remained in a state which made it doubtful whether she could rally or sink for some weeks, and died quite suddenly April 4.

In accordance with the patient's often expressed wishes an examination of the body was made ten hours after death, with the assistance of my professional brethren, Drs. A. Rising and W. H. Mather.

The heart was found much enlarged—of more than twice its normal size—weighing a pound and a quarter. The hypertrophy of the left ventricle was especially noticeable, its walls being fully an inch in thickness. This condition was found to have been occasioned by an ossific deposit in the mitral valve, causing something of a contraction in the auriculo-ventricular orifice, but more of an insufficiency in the valve itself, with consequent regurgitation. The stage of dilatation apparently had not been reached, hypertrophy much predominating, which would account for the extraordinary vigor of the patient's circulation. Her extremities were never cold, notwithstanding her low condition, and she required much less clothing on her bed than any other member of the family. This disease of the heart, no doubt, originated in former attacks of rheumatism, to which the patient had been subject. Further investigation led us to believe that it was not the principal cause of her ill-health nor of her death, although it was of long standing. Previous to her illness her husband could see a book shake in her hands across the room, from the violent action of her heart, and could always feel its impulse through her hand resting on his arm; and yet, strange to say, no complaint was ever made by the patient in regard to her heart while under my care.

The liver was of large size, its left lobe extending quite across the epigastrium into the left hypochondrium, where the spleen was found firmly adherent to it throughout three-fourths of its extent. As the liver had contracted no other adhesion, and was healthy in appearance, it was inferred that the patient had suffered an attack of splenitis in former years; but no such attack was ever recognised. She often complained of a feeling of tightness across the epigastrium, especially after eating. Beyond this slight inconvenience it is believed no harm resulted from this unwonted intimacy between two not very neighborly organs.

Directing our attention to another region of the abdomen, we quickly discovered evidence of most extensive disease in the adhesion to the bladder and uterus of all the adjacent viscera. Indeed, it is no exaggeration to say that there was an agglutination of all the pelvic organs! In endeavoring to separate coils of intestine from the bladder, its posterior wall was easily torn off; showing that the inflammation of the organ had been so intense as to produce an organic degeneration of portions of its sub-mucous cellular tissue and muscular fibre. The mucous membrane was of a pale ash-color, with a patch in the bas-fond of a dark slate-color. The capacity of the organ was reduced to a few ounces, and its contractibility must have been greatly impaired. All of which is in harmony with the pain and difficulty attending its evacuation, and with the small quantity of water voided, but not at all in harmony with its healthy appearance, since no unusual color or odor, nor any muco-purulent, or other abnormal deposit (with the single exception of the urate or lithate of ammonia, which is sufficiently common in those subject to rheumatism), was ever noticed.

Of the uterus and its ligaments only a cursory examination, I regret to say, was made, and nothing remarked beyond their adhesions.

The small intestines showed unmistakable signs of having been involved in the inflammation of the neighboring organs, and from their adhesion to them could have had but little peristaltic action; which fully accounts for the patient's diarrhœa in the earlier months of her sickness, and for her subsequent impaired digestion and painful defecation—the latter, however, may have been occasioned by a fissure in ano, or internal piles; but no examination was made of the rectum, and only the extremely contracted state of the large bowel noticed, which seems to be commonly observed in autopsies.

The lungs, kidneys, and other organs not mentioned, were healthy, and no tubercles were found in any part of the body.

Yours truly,
J. K. Mason, A.M., M.D.

Suffield, Conn.

THE DEATH OF DR. GEO. K. AMERMAN,

OF CHICAGO.

To the Editor of the Medical Record.

Sir—Death has once more visited our profession, and claimed his tithes of the choicest and the best. Dr. George K. Amerman expired at his home in Marcellus, N. Y., on the 20th June, 1867, cut off in the prime of life by that fell destroyer, *phthisis pulmonalis*. For nearly two years his health has been failing, but with

indomitable energy the doctor continued to hold his clinics at the hospital during the winter, and to visit his patients, in spite of the admonition of his friends, until he was completely prostrated by tubercular pleuritis and laryngitis. Rallying a little, he left the city, early in April last, fully determined to visit Europe during the summer, and confident of complete recovery. It was only after an interview with the highest medical authority in New York, that he could be persuaded of his danger. Returning then to the home of his boyhood, he arrived in time to close the eyes of his wife, who died, after a short illness, of acute *pneumonia*. His disease seemed to receive new impetus from this shock; he sank rapidly, and ceased to breathe at 4.30 A.M., June 20th. This sorrowful event was announced to the Chicago Medical Society at their last meeting. The following Resolutions were presented by a committee for the action of the Society:

Having been informed of the death of their associate, George K. Amerman, M.D., the members of the Chicago Medical Society desire to testify for the deceased their respect and their feelings of personal loss, by these resolutions:

First, That in this affliction we lament the death of one who, long identified with our community, though young in years, was old in professional renown. A man whose life was a career of brilliant success, a Christian in deed as well as in name, at the height of his reputation,—he has now received the crown of immortality.

Second, That to the members of our profession we earnestly commend the example afforded by the life of our departed associate.

Third, That to the surviving relatives of our beloved friend we tender this expression of our sympathy, in view of their bereavement, ever desiring with them to bow in humble acknowledgment of the almighty power of that God in whose hand are the issues of life and death.

Fourth, That a copy of these resolutions be furnished to the relatives of the deceased, and to the medical journals and daily newspapers of the city.

The report of the Committee was accepted. Dr. Ross then read a technical history of the last illness of the departed brother. Dr. A. R. Gore, who had known Dr. Amerman from infancy, being invited to address the Society, proceeded to relate the following interesting facts concerning his friend:

At the time of his death Dr. Amerman was in his thirty-fifth year. The son of a rural farmer in Central New York, his boyhood was distinguished by fondness for study, and by disinclination to the drudgery of farm work. He was obedient and kind, but *good for nothing* on the farm. He early manifested a passion for teaching, and at the age of sixteen his only ambition was to become a school-teacher. His father, however, proposed that he should study medicine. To this he consented. Placed under the guidance of Dr. Gore, then a practising physician in Owasco, New York, he pledged himself to pursue the study of medicine, subject to the direction of his preceptor, for five years, before attempting to commence its practice. He accordingly attended three courses of lectures in the University Medical College of New York, graduating with honor in the spring of 1854. Still acting under the guidance of his preceptor, he secured a position for one year on the resident medical staff of Bellevue Hospital. The next year he became a member of the resident surgical staff of the same hospital. There, in the enjoyment of the friendship and confidence of the most distinguished physicians and surgeons of New York city, Dr. Amerman completed the fifth year of his course of study. At once received into partnership by his former preceptor, and removing to Chicago, he commenced the practice of his profession in 1856. He was appointed surgeon to the Illinois Central Railway, an office which he filled with great credit until the time of his death. He was also one of the surgeons to the City Hospital until that institution was closed, during the war; and was the leading spirit in the surgical staff of the County Hospital from the time of its renovation until failing health compelled him to surrender his large and lucrative practice.

After listening to the remarks of different gentlemen who united in eulogizing the memory of the deceased, the resolutions were adopted, and the Society adjourned.

A series of similar resolutions was adopted by the Medical Board of the County Hospital, an institution of which Dr. Amerman may be said to have been the founder and chief executive officer. Beloved by all his associates, he possessed the unbounded confidence of a large circle of patients; and throughout the whole range of an extensive acquaintance, his influence was felt to a degree which no other physician in this city could approach.

M.

CHICAGO, July, 1867.

New Instruments.

A POST-MORTEM NEEDLE.

BY J. H. HOBART BURGE, M.D.,

BROOKLYN, N. Y.

THERE is no part of an autopsy so much dreaded as the *sewing up*. Hardly a surgeon has escaped pricking himself with the needle. Sometimes the integument is so tough that we are in danger of puncturing our fingers with the blunt extremity of the needle. A thimble does not obviate the difficulty, since with its best aid the needle may either turn back or break. At my last experience of this sort, I resolved to devise an instrument which should answer all the indications. The following is the result:

The needle may be of any convenient length, with the eye sufficiently removed from the end to admit of its being accurately fitted to the calibre of a cylindrical stile, which has a firm handle at the other extremity. I hardly need describe its use. When threaded, pass it through the integument like an awl,—seize the needle with the thumb and forefinger, and withdraw the handle,—now draw the thread tight. Re-insert the needle in the handle, and take the next stitch, and so on, and *sew* on. It is hoped this little contribution may not only prove a comfort, by facilitating that which is sometimes a real labor, but also by saving much valuable time to those who procure for us our most valuable pathological specimens, and better still, that it lessens the number of those sad sacrifices to science—the deaths from dissection wounds. The instrument is made by George Tiemann & Co., 63 Chatham st., New York.

NOVEL METHOD OF MANUFACTURING GAS.—According to a Swiss journal, a means has been discovered of utilizing cockchafers. The *Estafette* of Lausanne states that between four and five millions of these insects were recently sent to Friburg for the manufacture of gas, and the residue forms an excellent carriage grease.

New Publications.

THE ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE. A HANDY-BOOK FOR STUDENTS AND PRACTITIONERS. By HENRY HARTSHORNE, M.D., Professor of Hygiene in the University of Penn. Auxiliary Faculty of Medicine, etc., etc. Philadelphia: H. C. Lea. 1867.

ON LIGATURE OF FUNIS. By A. F. A. KING, M.D. Washington, D. C.

Medical Items and News.

PERSONAL.

DR. ERNST KRACKOWIZER has been elected one of the attending surgeons to the New York Hospital, *vice* Dr. Willard Parker, resigned.

DR. THOMAS M. MARKOE has been appointed a Visiting Surgeon to Bellevue Hospital, to fill a vacancy occasioned by the death of Dr. William H. Church.

DR. WILLIAM H. VAN BUREN was recently elected one of the Consulting Surgeons to the New York Hospital.

DR. JOHN SIMMONS, for a number of years Medical Adviser to the City Prison, died of congestion of the brain, June 14th, ult.

MR. HOFF AND THE N. Y. ACADEMY OF MEDICINE.—At the last meeting of the Academy of Medicine, the following resolutions were unanimously adopted:

Whereas, W. L. Hoff, proprietor or agent of the "Hoff Malt Extract," is issuing publications through the secular papers, and by means of pamphlets and circulars, professing to quote favorable opinions expressed in a report of a committee of the Academy;

And, *whereas*, the said Hoff is widely circulating a letter purporting to have been written by a Fellow of the Academy;

And, *whereas*, the publications of said Hoff are so adroitly and designedly worded as to impress the mind of the reader with the belief that the Academy has endorsed his nostrum, and has thus apparently compromised its dignity and professional standing—Therefore,

Resolved, That the N. Y. Academy of Medicine does hereby proclaim and declare that it has not expressed any opinion in regard to "Hoff's Malt Extract," and that any and every use of its name in recommending said Extract is unauthorized by the Academy.

Resolved, That a copy of the above preamble and resolutions be sent to the Medical journals of this city, and that the Medical journals throughout the country be requested to copy the same, in justice to the Academy and the profession.

QUARANTINE INTELLIGENCE.—From all the West Indian Islands reports have recently been received that yellow fever is prevailing to an alarming extent. On the 8th of last month the United States Consul at Kingston, Jamaica, notified the Collector of Customs at this port that yellow fever was prevailing at that place in the form of an epidemic of a malignant type, and that at least twenty-five per cent. of the cases had proved fatal. From New Orleans many contradictory reports have been received, and one of the latest telegrams relative to the sanitary condition of that city was received by Messrs. H. B. Cromwell & Co., on the 3d inst. It contains the following: "Am officially advised by the Board of Health in this city that only eight cases of yellow fever have occurred during the last two weeks; six proved fatal; no indications of its assuming an epidemic form. City generally healthy; one hundred and seven deaths during the week ending Sunday."

At Quarantine there has only been one death during the present year, and that occurred some months ago. At the present time there are no cases of contagious sickness on board the hospital ship, all reports to the contrary notwithstanding. On the 4th inst., the bark King Harold, from Matanzas for Greenock, Scotland, put into this port in distress. She reported that the captain died in hospital of yellow fever before leaving Matanzas. The mate then assumed command, and during the voyage he also sickened and died of the same disease, and on the 1st inst. two of the crew died. On arriving at this port the remaining members of the crew were completely prostrated with over exertion and fear, and it was found necessary to remove several of them to the hospital ship Falcon, where they are now recuperating.

The steamship Rising Star, from New Orleans, is now detained in the lower bay for the purpose of fumigation. —*N. Y. Herald, July 7th.*

AN ORGANIZATION OF MEDICAL TEACHERS for the purpose of advancing the interests of medical education has been formed in England.

THE CATTLE PLAGUE has reappeared in several parts of Great Britain.

THE LEAVENWORTH MEDICAL HERALD.—We have received the first number of this Medical Monthly, and are well pleased with its contents and style of make-up. It is under the editorial management of C. A. Logan, M.D. and T. Sinks, M.D., both of whom give evidences for their fitness to the undertaking. We wish success to the enterprise.

THE AMERICAN JOURNAL OF DENTAL SCIENCE has been revived; Drs. A. Snowden Piggot and F. J. S. Gorgas are the editors. It is published at Baltimore.

ABORTION IN COWS.—The New York Legislature at its last session made provision for a commission to investigate the subject of Abortion in Cows. Prof. John C. Dalton has been appointed one of the commissioners, and will be assisted in his investigations by Drs. Carmalt and Haigh of this city.

MEDICAL SOCIETY OF NEW JERSEY.—The Medical Society of New Jersey held its one hundred and first session in Newark, on the 28th and 29th of May. The following officers were elected for the ensuing year: President, John C. Johnson, of Blairstown; Vice-Presidents, Thos. J. Corson, of Trenton, Wm. Pearson, of Orange, and Thos. F. Cullen, of Camden; Corresponding Secretary, C. Hodge, of Trenton; Recording Secretary, Wm. Pearson, Jr., of Orange.

SPECIAL DEPARTMENTS for Eye, Ear, and Skin, have been established at the London Hospital.

ALBANY MEDICAL COLLEGE.—The following appointments have recently been made in the faculty of this institution. Dr. S. Oakley Vanderpoel, M.D., Prof. of General Pathology and Clinical Medicine; James E. Pomfret, M.D., Prof. of Physiology; and John V. Lansing, M.D., Prof. of Materia Medica.

PREPARING OXYGEN.—Sub-chloride of copper when exposed to the air absorbs a large quantity of oxygen, and when the metal is afterwards gently heated, readily parts with the gas.

MEDICAL BARONETCIES.—Mr. Wm. Lawrence, the eminent surgeon, has recently had the honor of a baronetcy conferred upon him, and Dr. G. Duncan Gibb, of Westminster Hospital, has succeeded to the baronetcy of Gibb of Falkland, Fife. We regret to learn that the former gentleman has since been stricken with palsy, and that but faint hopes for recovery are indulged in.

HYRTL'S MAGNIFICENT ANATOMICAL MUSEUM has been purchased by an American College for $8,000, it having been offered for sale at the Paris Exposition. Hyrtl is the Professor of Anatomy at Vienna, and from personal observation, we are prepared to testify to its value. What college has the treasure?

CHOLERA AT VIENNA.—On May 4, a man was attacked with cholera at Vienna, the first case of the season.

ELECTRO-THERAPEUTICS.—Two wards have been set apart in the Vienna Hospital for Electro-Therapeutical purposes.

PROFESSOR JUNGKEN, of Berlin, at seventy-six years of age, is still in active practice, performing such operations as extraction of cataract, iridectomy, and enucleation of the globe.

TO BECOME WELL-INFORMED PRACTITIONERS. — You must mingle with other men in medical societies, otherwise you will soon become contracted in your views; for, you must remember, if you are guided simply by your own limited experience, you will surely go wrong. Laws and deductions in medical sciences ought to be drawn from large numbers of observations. Let your libraries be in receipt of the really valuable medical literature, as it comes from the press, especially of the monographs and works of the most distinguished authors. Let your books be your greatest luxuries—let your shelves be the last places where you economize in your expenditures. Money spent there is well spent; new books are as necessary to you as tools are to a mechanic; you cannot do your work well without them. Do not confine your purchases to home publications, but keep your orders at the importer. Let your office table be supplied with the most prominent domestic and foreign journals and reviews. As Tyler Smith has expressed it—"In consultations two or three meet; in societies hundreds stand face to face, and have the privilege of exchanging thoughts, but in the periodical press we have the collision of thousands of minds busied with the same subject; thus more truth is elicited, more progress made than could be by solitary thinkers."—*Address of Prof. F. Donaldson, University of Maryland,* 1867.

ABORTION AND INSANITY.—I have for many years received and treated patients whose insanity was directly traceable to this crime, through its moral and physical effects. Some have, after recovery, given a sad chapter of perverted life, and disclosed the revolting fact that the suggesters, aiders and abettors of this heinous offence against God and nature—this rude violation of the best instincts of women—were persons of their own sex. One woman told me, and the statement was verified by her husband, that seven successful abortions were procured on her by one of her female friends—and both these women were highly respectable persons and members of the church. When, in broken health and after failure in the *eighth* attempt, she applied to a physician, he informed her of the criminality of the act, its dire consequences to health, and advised her against the continuance of such a practice. She subsequently, however, obtained the services of a charlatan, who succeeded in inducing abortion; and, some months later, this woman was admitted to the Asylum in wretched health and suffering from melancholia, which her pastor, ignorant of her true history, attributed to religious excitement. A minister recently informed me that, in his congregation, in a country village, one of the prominent women approached his wife with a proposition that she should destroy her prospective offspring, declaring that she thought it right to do so, and mentioned others who resorted to the practice, rather than be troubled with children. It cannot be possible that such women are ignorant of the crime of infanticide. The only plea that can be made for them is that they do not comprehend the turpitude and criminality of the act, and do not recognise the solemnity of marriage and the true dignity of maternity. One could almost wish that such women might not be mothers.—*John P. Gray, M. D., 24th Annual Report of State Lunatic Asylum for* 1766.

THE ANATOMY OF THE GORILLA.—The variation in the size of the brain is considerable in the human species, but I think the position and the quality of the brain have more to do with the intellectual manifestation in man than the size, although the intelligence is visibly altered according to the weight of the cerebral deposit. The cranial capacity of a young gorilla about a year or two old is from twenty to twenty-two cubic inches. Supposing a subsequent development equal to that in man, this would produce an animal of a high grade of intelligence, but it is only the bones of the skull that increase in the gorilla, as it grows in years, not the brain itself, which remains about the same in the adult specimen as in the infant young. This proves conclusively that the animal has very small power of intelligence, and from my own experience I believe the limit of that intelligence is reached within a year or two after the birth of the young gorilla. In the Caucasian skull the average capacity of the brain is about ninety cubic inches, and the maximum has been found to be one hundred and fourteen inches. In man the position of the head and the curvature of the vertebra column make the erect position the only natural one any other being quite painful after a while. This difference is an organic one, resulting not from habit, but from natural structure. The whole frame of man proclaims that he was made to carry himself in an erect posture; and, unlike the quadrumanous apes, his superior extremities do not perform any service in the act of locomotion. Then comes the head, too, with its enormous expansion of brain; the condyles of the occiput are brought forward to the base of the skull, and by this balance of the head on the neck bone, the arms in man are in more symmetrical proportion with the length of the legs. The lower limbs, or legs, are longer than in any apes, the pelvis is broader than it is long, the iliac bones inclined steeply, the humerus is larger than the fore-arm, and, finally, the thumb of man is much larger than in any ape, and the most useful member of the hand. According to Dr. Gratiolet, of Paris, even in the lowest idiots the brain presents the material and zoological character of man, and, although often inferior in appearance to that of the chimpanzee or other apes, it is nevertheless an undeniable human brain. Disease or degradation in continued reproduction may dwarf a man, but will never make him an ape. Although there is great dissimilarity between the long frame of man and that of the gorilla, there is also an awful likeness, which in the latter resembles a hideous caricature of a human being.—*M. Paul du Chaillu.*

RIGID PERINEUM; DIVISION OF THE SOFT PARTS.—Dr. Beattie, in the *Dublin Journal of Medical Sciences*, recommends in cases of rigid perineum, that the soft parts be divided by probe-pointed scissors sufficiently to allow the head of the child to pass. By this method of procedure, the duration of labor may be shortened sometimes by several hours.—*Cincinnati Journal of Medicine.*

Original Communications.

HEPATIC ABSCESS: TWO CASES.

By R. B. MAURY, M.D.

PORT GIBSON, MISS.

In the midst of conflicting opinions concerning the etiology of this disease, it is just to suppose that the publication of all fathfully recorded cases, which may throw any light upon the subject, will be acceptable to the profession.

There is a very large mass of clinical evidence which associates this lesion with the ulceration of dysentery; and though a number of excellent observers seem inclined to believe that this relation is not that of an effect to a cause, but that the two diseases are the joint effect of a common cause, I do not think they have adduced satisfactory reasons to support such a view; still less do I think that facts will sustain them in endeavoring to ascribe hepatic abscess to remittent fever; or that in dysentery there is necessarily or generally (outside of India) any special derangement of the functions of the liver.

With these views the history of two cases is here presented: 1. The first is that of George H., an old negro, between 65 and 70 years of age, who came under my care early in February, 1860, for the relief of chronic dysentery and enlarged prostate. The enlargement of the prostate had been a source of trouble to him for nearly three years, and became rapidly more so after I saw him. He had suffered from dysentery about fifteen months. He died 28th of June, 1860. Nothing of peculiar interest had been presented in the history of the case, further than the disease of the prostate, and for the examination of this an autopsy was held ten hours after death.

The usual appearances of senile hypertrophy of the gland were presented. The third lobe was enlarged, and had proved a serious obstacle to the passage of urine: the bladder was thickened and ulcerated. The kidneys presented no appearance of disease. The large intestine was studded with ulcers, chiefly along the course of the descending colon and rectum. The liver, to outward appearance, was healthy, but upon being opened, was found to contain two abscesses in its right lobe; these were small, and were circumscribed by a distinct sac; they were of an oval shape, and respectively about one and two inches in long diameter; they seemed to be quiescent or retrograding, no inflammation being apparent in their walls; one contained pure pus somewhat thickened; the other contained a yellowish matter of cheesy consistence, which was evidently pus also. The lungs were healthy, with the exception of old pleuritic adhesions.

During the time that this man was my patient, no sypmtoms were presented which attracted attention to the liver in any way, and I was surprised to find the abscesses after death. He had had no attack of fever for several years, and his case may fairly be quoted as an illustration of that relation which has been found to exist between hepatic abscess and dysentery.

In connection with this case I may add, that two years before, I saw in Bellevue Hospital, a similar instance in which multiple circumscribed abscesses of the right lobe were stumbled upon in a *post-mortem* examination of a case of chronic dysentery.

2. My second case was that of H. S., a young man, 32 years of age, a native of Switzerland, who presented himself on 7th June, 1866. He was of splendid physique, and had been keeping bar for twelve months, but his proper occupation was that of a stone-cutter, which calling he had followed up to the date of his becoming a soldier in the army of Northern Virginia, five years before. During his term of military service he had never been wounded, and with the exception of two slight attacks of diarrhœa, which had lasted a few days only, he had been entirely exempt from disease. In his whole life he had but one attack of illness; in this all the symptoms pointed to the liver, and for it he was, for several months, under the treatment of a physician in Memphis; this occurred eight years before. For ten years his habits had been very irregular, and occasionally he drank to great excess; now and then, of late years, after unusual indulgence in drink, he would suffer from "little bilious attacks" for a day or two. He had never had syphilis, had never been jaundiced, nor had he ever had hæmorrhoids.

Three months previously to his consulting me, immediately after a debauch, and while suffering from a severe cold and cough, he was suddenly seized with violent pain through the region of the liver from side to side: this continued for several hours, when the pain disappeared from the left side; but became fixed on the right, and extended thence to the abdomen. His physician thought the disease bilious colic, and gave mercurials for several days, but without much relief. He soon came under the care of another physician, who considered the case one of pulmonary disease. Under his treatment the febrile symptoms passed away, and the patient convalesced so as to return to business and old habits.

When I saw him in June, his appearance was nearly that of health, and he complained of nothing except a dull pain at base of the right chest posteriorly and laterally. He had no cough, the bowels and kidneys were acting properly, and the skin was moist; but the pulse was 110. On physical examination, there was found slight comparative dulness at the right base posteriorly; over the same region vocal resonance was somewhat diminished, respiration feeble, and the heart sounds abnormally distinct: with these exceptions, no deviation from health was found on a very careful examination of both heart and lungs. I was embarrassed in diagnosis, and was inclined to think he had had in February an attack of pleurisy with effusion, which had not been entirely removed, and that he now had a subacute attack. He had never had epistaxis, nor had he ever vomited blood. Iodide potass. internally, tr. iodine to the chest externally, were prescribed.

On the 14th June he returned, being worse: pain was on the increase, bowels confined and urine highly colored: skin very moist: pulse 110. He was advised to take one grain of calomel morning, noon, and night, for two days, and then to have it gently carried off by small doses of sulphate of magnesia. From this time to the 20th of June, he was observed to have fever every evening and night, followed next morning by heavy sweats; the pain steadily increased, and now required the use of morphine in small quantities; the appetite failed, and the tongue became red and divested of epithelium at the tip.

On the 20th June a decided tumor, five inches in diameter, was made out on the right side of the body, about the base of the chest, and corresponding to the hepatic region; its lower margin was on a line with the tenth rib; it presented no redness, but its temperature was raised above that of the surrounding tissue; the right rectus abdominis muscle was very hard and resisting; anterior posterior vertical hepatic dulness was somewhat increased; there was no pain referred to the right shoulder. The bowels were moved naturally every day or two; there was no nausea; the urine, though free, was high colored; sp. gr. 1024; no albumen,

no biliary coloring matter, and no biliary acids present in it. In the forenoon, the pulse was 100; the temperature in the axilla 98° to 99°; in the afternoon, pulse 115 to 120, and the temperature 101°.

Poultices to the tumor, and morphia at night, constituted the treatment at this time. The case now presented the appearance of hepatic disease, but all the recognised causes of abscess of the liver could be excluded. The patient had never had remittent fever, nor dysentery; nor had he ever had any symptoms of biliary calculi.

On the 5th July, my notes state that the patient was evidently losing ground; that he had become pale, anæmic, and sallow; much emaciated and very feeble; the hectic symptoms were decided and regular; the tumor had enlarged and become very painful, so that opiates were required constantly. Elixir vitriol was given to control the heavy and exhausting sweats. The temperature in the axilla, in the foornoon, did not rise above 98°; in the evening it was 101°.

July 7.—Under the influence of chloroform, the tumor was explored, and punctured with a tenotomy knife; a very small opening was made and pus evacuated in moderate quantity, with great relief to the patient's sufferings. The pus was healthy in appearance, and of no peculiar smell. He was ordered to use stimulants freely, and concentrated nourishment.

July 14.—He loses an immense quantity of pus, which is of a reddish-brown color; is failing rapidly, the pulse becoming more frequent, and the urine very scant; will take nothing but stimulants, and food in very small quantity; sweats all the time profusely.

July 25.—A large slough is forming around the opening made for the evacuation of pus; frequent small hæmorrhages have occurred and coagula often obstruct the orifice; the tongue is naked, dry, ulcerated, and the same condition seems to have extended to the pharynx; deglutition is almost impossible. The pus now shows signs of decomposition; the urine looks like strong ley, but no bile can be detected in it on careful testing. Pain is complained of in the left hypochondrium, when he turns on that side to have the abscess dressed. To this time the tension and resistance of the rectus and other muscles on the right side of the abdomen have been well marked: no pain has been referred to the right shoulder.

July 30.—He died this day. Autopsy held one hour and a half after death; body warm; no rigor mortis; emaciation excessive.

The body being opened, the lungs were found very pale, and presented, anteriorly, large patches of dark pigment; they were both adherent over a very great extent of the costal pleural surfaces: the adhesions were firm and old. With this exception there was no evidence of disease about them. The pericardium contained about an ounce of serum; the heart was so completely covered with a superficial layer of fat, that the muscular tissue could be discerned in two or three places only; otherwise it was healthy.

The cavity of the abdomen being opened, the liver *in situ* did not appear enlarged; its color was a yellowish-brown, and it presented to the naked eye the appearance of fatty degeneration. Slight and easily torn adhesions connected the upper surface of the left lobe with the diaphragm; the under surface of the same lobe was adherent to the anterior wall of the stomach, and when separated from it, showed that an abscess had pointed there, and would in time have emptied itself into the cavity of that viscus. The outer portion of the upper surface of the right lobe was also adherent to the diaphragm, and at a point corresponding to the external opening through which pus had been discharged during life, the adhesions were very thick and strong, and further examination showed that here a large abscess in the right lobe had pointed and emptied itself. On the upper surface of the right lobe, near the median line, was seen the thinned wall of a third abscess, which must soon have contracted adhesions with the diaphram, and would ultimately have emptied itself into the right pleural sac. The wall of this abscess was here not more than two lines thick, very convex, and the pus coud be seen through it before it was opened. The intestines *in situ* appeared normal; there was no peritonitis, except at the points where the adhesions mentioned had been formed.

On removing the liver, it was found thickened on its posterior margin, being nearly double the normal thickness; and upon dissection there were seen in the right lobe two large abscesses, already described, each the size of a child's fist, and with jagged irregular walls, no sac circumscribing them. The abscess in the left lobe was nearly as large as either of those in the right, and was of the same character. The contained pus was of a greenish yellowish color, and unlike that discharged during life. The abscesses were each distinct, and had no connexion the one with the others.

Besides these, there was found, near the outer margin of the left lobe, and on its under surface, a puckered cicatrix, the remains, without doubt, of an old abscess of small size, which was tied to the transverse colon by a fibrous band an inch long; the band was of a whitish color, and very hard, and so was the cicatrix, and neither presented any traces of recent inflammation. This feature is of especial interest in connexion with the attack of the liver from which the patient had suffered eight years before. A minute inquiry into the history of that attack, however, failed to establish the existence at that time of any of the known causes of abscess. The portal vein appeared healthy. The gall-bladder filled with yellow inspissated bile contained no calculi, and presented no appearance of ulceration. The stomach and several feet of small intestine were carefully scrutinized with a view to discover traces of old ulceration, if any existed, but nothing was found: the entire length of the small and large intestines was free from disease.

The kidneys presented no appearance of change, except that they looked fatty like the liver; their capsule was easily separated, and nowhere adherent. Suprarenal capsules were normal. Pancreas was so likewise. The spleen was a little larger than usual, but appeared healthy. No enlargement of mesenteric glands.

It is to be regretted that, in the study of this case, no clue could be found to the cause of the abscesses; the same may be said of the case presented by Dr. Geo. Pepper to the Philadelphia Pathological Society, February 14, 1866. The puckered cicatrix found in the left lobe, and bound by a fibrous band to the transverse colon, without doubt the remains of an old abscess, was probably a connecting link between his last illness and the attack from which he suffered eight years before. It is possible that he then had multiple abscesses which became encysted and remained stationary; that, in one of them, the pus underwent those degenerative changes necessary to absorption, the cavity of the abscess was obliterated, and only a cicatrix left to mark its place; the other three, after being inactive for a period of eight years, for some unknown cause took on new inflammation, and proceeded to the destruction of life.

That such a course is pathologically possible, may not be easily demonstrated, but it may be inferred from the remarks of Mr. Paget on old abscesses.

"The abscess has a natural tendency to open, unless all the inflammation in which it had its origin subsides. Inflammation appears to be not only conducive, but es-

sential to the spontaneous opening of abscesses; for where it is absent the matter of chronic abscesses will remain like the contents of any cyst, quiet for weeks, or months, or years." (*Surgical Pathology*, 3d American edition, p. 283.)

Special attention was paid to the temperature throughout the case, and the thermometer was never found to vary from the result given in the foregoing history.

SPHYGMOMETRY.

By E. SEGUIN, M.D.,
NEW YORK.

The pulse, as the external expression of circulation, has always been the beacon of physicians; and though pathological temperature, as expressed by the thermometer, bids fair to take the lead in diagnosis, the *pulse* may finally remain what it primarily was, if we improve the means of perceiving and reading it, as we have the other clinical signs.

The appreciation of the pulse is not necessarily confined to the medical touch. In a time not very far back, physicians had only the bulb of their fingers to perceive it. Then the detached second-hand of the watch came to their aid; and lastly, we have the "pulse writer," the sphygmograph, to add precision to perception, and at the same time register accurately the variations of pulse curves.

A revolution of this sort is neither to be deprecated nor avoided; it is merely to be complied with, or submitted to, not in a spirit of blind restlessness and of worshipping of what is new, for novelty sake; but with the steady and holy spirit of progress; not as the *absolute* best, but as the *present* best instrument of observation of the phenomena of circulation.

The instrument of Professor Marey serves to perceive circulatory phenomena unknown, or imperfectly known, and to record them.

Though the pulse may be considered as a *unit*, it may also be—it has been in fact—studied analytically in regard to its volume, strength, rhythm, frequency, and the shape of its waves. The three first properties may be perceived by the medical touch; the fourth may be guessed by the same sense, but can only be measured with a chronometer; the *shape of the waves of the blood* escapes almost entirely the most gifted fingers, and what is known as the "dicrotic pulse," stands as a monument of the incapacity of our unaided sense to perceive anything further.

We admitted that the volume, strength, and rhythm may be perceived by the touch; but is it sure that they uniformly and always are? If so, how is it that physicians appreciate them so differently, and express them so variously, that they hardly understand and trust each other about the pulse? Medical tact has never been especially educated in schools or hospitals, and physicians have had to form their own notions about it; and no particular language could possibly connect their essentially individual ideas on the subject. This judgment is, perhaps, more forcibly expressed in the language of two men of great authority. Prof. A. Flint, Jr., says: "It is evident that few of the characters of a pulsation, occupying as it does but a seventieth part of a minute, can be ascertained by the sense of touch alone." —(*Physiology of Man*, vol. i. p. 251.) And "considerable practice scarcely teaches us to estimate the exact degree of the alterations of the pulse; but certainly not with sufficient distinctness to convey to others an accurate idea, or even to be able ourselves to compare one observation with another." (Dacosta in *Diagnosis*.)

This double incapacity to read the pulse with the tact even aided by the watch, and to express it in words susceptible of being agreed and assented to, has led ingenious minds to contrive instruments susceptible of completing the observations begun with tactile imperfection. Before speaking of the last and best of them, we ought not, in justice, to omit the first one. As far back as 1833, Dr. Jules Herrisson presented to the Institute of France his *Sphygmometre*, accompanied with an excellent notice, and sixty observations of diseases of the heart, observed with his instrument. The sphygmometre had for its object to *render every action of the arteries apparent to the eye*. Its first advantage, expressly says the author, is to enable the physician to *write down* an exact description of the pulse during health, and to keep it at the standard to which he ought to bring the pulse back in case of disease.

It was to be applied in hospitals, to allow the pupils to judge with their own eyes, instead of relying on the assertion of the teacher, whose experienced touch would not give the same sensation as their inexperienced one. In consultation every physician might apply the instrument in his turn and exhibit it to all. In written consultations a far greater degree of accuracy was promised by measuring the movements of the pulse, than by describing them in words. Changes might be written down as often as they occurred, according to the march of the disease, or to the effects of remedies. The sphygmometer gave indications of some disease of the chest that percussion or stethoscopy could not find. It revealed certain particularities of the arterial circulation which the tact could not detect.

Its construction—the device of a reputed engineer, Paul Garnier—was very simple, and rather in keeping with the few rude medical and surgical instruments of that time. It consisted of a glass tube backed by a paper with the graduated figures marked on it. The end of this glass tube was inserted into a steel stem, terminated by an inverted cup, which was closed by a piece of gold-beater's skin stretched over its mouth, and secured by a rim, as is the head of a drum. The reservoir was filled with mercury, and communication might be intercepted between the cup and the capillary glass-tube by a stop-cock. When the heart or pulse were to be examined, the sphygmometre was secured *in situ*, its ups and downs noted, and the stop-cock applied whenever any point reached by the mercury needed to be ascertained.

It was a measurer, not a writer of the pulse; it actually showed it, what the sphymograph does not do —but somebody had to write its results, otherwise they would pass away unrecorded

Imperfect as the sphygmometre may have been, but pregnant with the future progress of diagnosis, it was presented to the appreciation of the Institute of France, where it received an official, that is, deadly reception from the commissaries. Magendie killed it, under the *pretence* that there was a discrepancy between the results of the two observers requested by the commission to experiment upon the same patient with the new instrument; but in reality for the *reason* that the eminent reporter was, or expected soon to be, engaged himself in experiments of the same nature. This plain accusation, of which we are not judge, but often proffered in similar cases, is from Dr. E. S. Blundell, who, in 1835, published the sphygmometre in London, with some modifications of his own, but giving full credit to Dr. J. Herrisson for his discovery. But it takes men like Fulton, and discoveries like his, to resuscitate from the scientific guillotine of the Mazarine palace. Herrisson's and Blundell's ideas on sphygmometry were sunk in oblivion. Vierordt took up the French idea—as it is usual for Germans to do—and transformed the sphygmo-*meter* into a sphygmo-*graph*. Progress, in one

sense, since the German instrument recorded the pulse; retrograde, in another sense, since it gave only the ups and downs of the waves, but not their peculiar undulations, which could be plainly read on the sphygmometer. Vierordt's instrument, however, did not attract the notice of the profession.

To Professor Marey, of the *Collège de France*, belongs the honor of having taken up the idea of Herrisson, giving it a new form, with the aid of recent mechanical ingenuity, and to have presented it at a time when the foremost men of the profession seemed ready to forward it, together with other improvements in diagnosis. The sphygmograph partly belongs to Herrisson for the idea, partly to Vierordt for the mechanism, but is evidently Marey's instrument. Of it exclusively we shall speak hereafter.

It does not give positively the volume, nor the strength, nor the rhythm, nor the frequency, though it indicates more or less these properties; but it does give positively the shape of the waves assumed by the circulating fluid; shape that the tact alone cannot perceive with any degree of precision, nor the language retrace from the tactile impression in words readily understood.

It serves already to register the undulations of the pulse dependent upon: First, organic changes in the channels of circulation; Second, functional alterations of the same, in disease; at various stages of disease; and during the morning and evening oscillations of fever.

But the chief use of the sphygmograph will be, as admirably foretold by Dr. Herrisson, to determine the normal pulse in health as a standard of comparison for future clinical observations; to determine it in infancy, in youth, at the climacteric epochs of life, and in any critical circumstance which may modify it. For, let us remember, the movement of the circulation is not invariably identical in all men, at all ages, nor in the same man under various contingencies. Whilst physiological temperature, once established for our race, holds good as the standard of health for everybody, physiological circulation presents such changes above and below its mean reckoning that, when we are called to a new patient, we never know, and can rarely suspect, what—if any—was the deviation of the healthy pulse from the would-be average. In this trying and frequent occurrence, we know very well what the pathological pulse is; but how can we form a judgment upon the distance which separates this pulse from the healthy one? since to establish our proportion we miss the most important term, the normal pulse.

In this respect alone the sphymograph will fill up a larger gap in our means of diagnosis. The thing is simple enough. Nearly every profession but ours has its landmarks. The police, for instance, has its *passports*, wherein the features, proportions, and individualities are recorded, so that a thief, wherever he goes, may be attended to according to his desert. But, strange enough, wherever an honest man falls a prey to accidents carrying with them disorders of the vital forces, even incapacity of communicating *de voce* with a physician, no record of his normal pulse, general habits, etc., can be found in his pocket; he has no *passport* throwing light upon his past health and reflecting that light upon the course to be pursued in his treatment. Thus men have been bled to death, because the power of their pulse was unknown to their attending physician; and others have ruptured important vessels in the act of vomiting, which would never have been provoked by an emetic, if certain curves in the waves of their pulse had previously revealed the state of these vessels. What signify eighty beats in a patient, whose normal pulse is seventy, and in another whose normal pulse is one hundred, if both standards are ignored by the physician? And what meaning must be attached to the absence of every fifth or seventh beat if it has lasted for years, or just made its appearance? The which we do not know. Nothing but records of the sphygmograph can give us any clew as to the physiological pulse, the basis of all pathological judgment. Here, more than anywhere else in diagnosis, conjecture must make room for positive knowledge.

But the sphygmograph has met with two objections, which happily bear not upon its principle, and hardly upon any temporary defects in its construction.

1st. "The very *perfection* and *nicety* of the instrument," says A. Flint, Jr., in his admirable treatise on Physiology of Man, "presents almost insurmountable difficulties in the way of its use by the general practitioner." Though this objection bears more upon our personal incapacity than upon the instrument, we hope to see this last improved, so that its handling will become more easy to practitioners. Anyhow, the difficulty resulting from the want of skill of physicians in using delicate instruments of precision, needs to be removed; the sooner the better. Nowadays surgeons handle efficiently instruments that Ambrois Paré would not have known how to use; ordinary mechanics and single girls easily manage instruments of labor that their grandparents would have been burned for as the devices of witchcraft; and we (average physicians) are accused by a competent writer, and likely not without reason, of being incapable of handling the most efficient instrument of diagnosis, *because* of its *nicety* and *perfection!* This avowal cannot put to shame the instrument, but those who cannot manage it. And this incapacity leads us to remark, that in our medical colleges and hospitals there is nothing like a systematic training of the *medical senses*, very little of handling of the instruments of physical diagnosis, and none at all of the manœuvring of the instruments of positivism in diagnosis, as the sphygmograph. Can it be hoped that this deficiency, once signalized, will be soon supplied?

2d. The other objection to the sphygmograph comes from its writing the pulse on a straight plan, so short that it can only receive the imprint of the moves taking place during ten seconds. But as there are changes of rhythm which are separated by more than that time, such changes may not chance to be included in our observation, or may be reproduced very irregularly on these ten-second diagrams. But this imperfection could easily be corrected by adapting to the sphygmograph of Marey a circular plan like Hierordt's, but moving in an ascending spirole, which would present to the pen a field sufficient to write down the undulations of one or two minutes.

We did not hear of any other criticism of the instrument of Professor Marey, and therefore we deem it as valuable to the practitioner as it has been to the physiologist—foremost among our means of positive diagnosis.

Festival Dinner to Drs. Wade, Staats, and McNaughton.—The Albany Medical Society recently gave a festival dinner in celebration of the completion of half a century in the practice of medicine by Drs. James Wade, Barent P. Staats, and James McNaughton. The affair was as interesting as it was unique. Speeches appropriate to the occasion were made by Drs. Staats, McNaughton, Alden March, and others. The recipients of the honor are still, we are happy to say, in the enjoyment of good health, and "may," in the language of one of the toasts, "their days be filled with the abundance and beauty of a glorious autumn, and their lengthening years be crowned with honor."

OVARIOTOMY—REMOVAL OF A MALIGNANT TUMOR—RECOVERY.

By EDW. T. CASWELL, M.D.,

OF PROVIDENCE.

The operation for ovariotomy has become so well known, and so many cases have ended successfully, that an apology might be needed for the publication of the present case, were it not for the character of the tumor. It occurred in the practice of Dr. Miller, and is reported with his consent.

M. M., an Irish woman, 45 years of age, married ten years ago; her husband died two years since. She has had two children and two miscarriages; the last child was born six years ago, and the last miscarriage occurred in the same year. Ever since the death of her husband there has been an irregularity in menstruation. She first noticed a swelling in the hypogastric region a year ago last August, and another prominence showed itself last March in the left lumbar region. The swelling constantly increased—the lower becoming the most prominent. There was some tenderness and pain. She first came under Dr. Miller's eye about midsummer. The abdomen was then much distended with fluid, and in the latter part of August she was tapped, and five quarts of a clear fluid were withdrawn. The distension, however, was not wholly removed. In the course of a month she again suffered from the amount of fluid collected, and upon examination it was decided that there was a tumor of ovarian origin, and the operation of ovariotomy was proposed, to which the patient readily yielded her assent. The operation was performed on the 10th of October. At that time the abdomen was as much enlarged as it is in the seventh month of pregnancy. Fluctuation was very manifest over the left side and towards the middle line. There were two comparatively hard prominences to be felt through the abdominal walls corresponding to the two points at which the patient had first noticed the swelling. The one in the left lumbar region seemed the most firm, and was somewhat sensitive upon pressure. There was some doubt expressed as to the result of the operation, but in accordance with the earnest entreaties of the patient it was determined to proceed with it.

The patient was placed upon a table in a warm room and brought under the influence of chloroform. After she was completely unconscious, ether was substituted for the chloroform. An incision was made in the middle line, commencing nearly an inch below the umbilicus, and carried down almost to the symphisis pubis. On reaching the peritoneal cavity there was a gush of fluid, proceeding from a small cyst, which was found to be attached to the anterior wall of the abdomen. The surface of the tumor was now exposed. It was lobulated, and in some of the lobes there were cysts manifestly containing fluid. There were some points of adhesion to the walls of the abdomen, and some to the intestines. These adhesions were broken up without much difficulty —one of some size attached to the small intestines was separated with the écraseur. The ones containing fluid were then punctured. From one a quantity of clear serous fluid escaped, from another a gelatinous substance, and from another a thick whitish fluid, resembling rice-water in appearance and consistency. Another portion of the tumor was decidedly hard. It was manifest therefore that the tumor was not as simple as had been supposed. It proceeded from the left ovary. The pedicle could be distinctly felt, and the whole of the tumor surrounded. In order to gain more room the original incision was extended up to the umbilicus. The tumor was now everted. The pedicle was attached to the broad ligament, and just outside of it could be seen the mouth of the Fallopian tube, with a small cyst as large as a pen upon its extremity. The pedicle of the tumor was isolated, and three ligatures of double-twisted saddler's silk, waxed, were passed through it, thus dividing the pedicle into three portions. Each was tied securely, and one end of each ligature was cut off close to the pedicle; the pedicle was then cut off without hæmorrhage. The small cyst upon the extremity of the Fallopian was then cut off, and as a slight flow of blood followed the knife, a single ligature was passed around the bleeding extremity. The pedicle was then returned into the abdominal cavity, and some fluid, which had unavoidably escaped into the cavity of the pelvis, was absorbed by soft sponges. During the latter part of the operation sickness at the stomach occurred, and caused some embarrassment, in consequence of the movement of the bowels which it created. They were, however, retained in their place as far as possible by gentle and firm pressure upon warm cloths. The edges of the wound were then brought together and fastened by six sutures of silver which passed through the peritoneal coat. The intervening spaces were drawn together with adhesive plaster, and the ligatures brought out at the lower extremity of the incision. A thick woollen pad was then laid upon the abdomen, and over this a broad swathe. The patient was then put to bed, and came out from the effects of the anæsthetics without unpleasant symptoms, save a quite feeble pulse. She received some stimulus immediately after the operation, and after a short time, as she complained of pain, a small anodyne.

The tumor weighed six pounds and a half. It was a composite tumor, made up, as has been said, of cysts and intermediate portions of considerable firmness; the same variety of contents was observed in the cysts as has been mentioned. The hard portion of the tumor, when examined microscopically, showed numerous round proliferous cells with nuclei and nucleoli, and presented the general appearance of medullary cancer. The whole tumor corresponded very well to the description which Rokitansky gives of cystoid tumors combined with medullary carcinoma. The result of the examination, therefore, seemed to lead to an unfavorable prognosis eventually, even if the patient should recover from the operation.

The patient was allowed a mild diet, with occasional doses of an anodyne for the first few days. Each night, for a week or ten days, she received a subcutaneous injection of morph. sulph. gr. ¼. The catheter was passed twice a day for two weeks, as she could not void her urine without change of position. Her bowels were kept quiet for one week after the operation. At the expiration of two weeks the small ligature around the mouth of the Fallopian tube came away, and some of the sutures were removed. At the end of the third week she sat up in bed, and at the expiration of a month she left the bed. The first of the large ligatures came away between three and four weeks after the operation, a second was removed after an interval of six weeks, and the third and last came away on the 29th December. The patient recovered from the operation without any drawback.

More than six months have now elapsed since the operation, and the patient enjoys perfect health; she says she has not been so well in years. There is no sign of any reproduction of the malignant growth, nor is there any trace of disease in the ovary of the other side. Certainly, if a malignant growth is ever entirely removed, this seemed to have been. The only unfortunate circumstance in connexion with the operation, and one that I do not remember to have seen mention-

ed in any case, is that within the last two months a small hernia has shown itself on the right side of the incision where one of the suture wires passed. As this did not show itself for four months, and not until the patient had been upon her feet, as usual, for six weeks or more, it seems evident that it can only be connected with the operation indirectly. A small pad, which she wears, suffices to keep the bowel in place.

April 29, 1867.

TWO CASES OF PENETRATING BAYONET WOUNDS OF THE CHEST.

By S. BARUCH, M.D.

Camden, S. C.

Case I.—Priv. Wm. Tintler was wounded in a bayonet charge on the 8th of May, 1864, at Spottsylvania C. H., Virginia. He was brought to the division infirmary an hour after reception of his wound. On examination, two apertures were discovered, one a triangular, ragged opening in the back, about one-half inch to the right of the tenth dorsal vertebra, and the other a small puncture, three inches below the right nipple, near the angle of the ninth rib.

He states that, as the charging line advanced with fixed bayonet, he was in a stooping posture, loading and firing rapidly. While thus engaged he was transfixed by a bayonet, and he asserts positively that he distinctly felt the withdrawal of the weapon.

When first brought to me, the following symptoms presented themselves: His face was pallid and anxious, nostrils distended; skin cool; pulse weak, but somewhat excited; breathing difficult and labored. There was slight oozing of blood from the posterior orifice, *which was contracted;* and bloody expectoration similar to that occurring in gunshot wounds of the lungs. These symptoms, conjoined with the direction of the wound and history of the case, led me to the belief that the right lung was transfixed. The "bent" position of the patient prevented implication of the right lobe of the liver, as in that posture the liver is separated from the diaphragm, and thus the bayonet avoided this organ.

May 9.—Patient expectorates bloody mucus, complains of pain in the right lung, has but little cough; shock has passed off and he is tranquil.

May 12.—Bloody expectoration ceased, but pain still continues. Auscultation and percussion reveal no signs of pneumonia or pleuritis.

May 13.—Posterior wound is healed over by scabbing. Still no symptoms of pneumonia.

May 16.—Patient is doing finely; there is some acceleration of the circulation and dyspnœa, but no *physical* symptom of lung disease.

May 17.—Sent to general hospital in fine spirits.

Case II.—Corporal G. Percival, a man of large frame and good constitution, was wounded in the same charge as Case I. His case was brought to my notice about three hours after the wound had been inflicted. Divesting him of his shirt, which had an opening in the back, I examined the chest carefully, and found two apertures of a triangular shape, one, the largest, in the back, just below the inferior angle of the left scapula, and the other, very small, over the sternum, near its right border, on a line with the fourth rib.

Patient was lying on his abdomen and partially on his left side, behind a small rail pile, when he was transfixed by a bayonet. When brought to the infirmary, his countenance was pale, but *did not* wear that expression of anxiety so peculiar in penetrating wounds of the chest; his symptoms indicated a shock to the nervous system, induced by the intense excitement incident to a hand-to-hand conflict. The whole system seemed to suffer from depression following great excitement. Acting on this view of the symptoms, I administered some stimulants and an anodyne, which partially restored the patient, and enabled him to recite his encounter.

Under perseverance of this treatment the pulse rallied, and skin became warm. There was but slight dyspnœa, no cough, and very little bloody expectoration; all indicating that the injury to the lungs was not extensive. A careful investigation of the posture of the patient during reception of the wound, and a consideration of its direction, convinced me that the weapon entered the back, grazing the right border of the posterior portion of the left lung, passing through the posterior mediastinum and invading the heart, which was displaced by the patient leaning somewhat on his left side.

May 9.—Patient has recovered from shock and nervous depression; this fact confirmed me in the belief that the lung was not seriously implicated, and that the heart and great vessels had escaped entirely. His countenance wears a more cheerful look; pulse somewhat excited, but it seems to be more of a nervous than febrile excitement. Very slight expectoration of bloody mucus, and he coughs only when he makes an effort to change his position.

May 11.—Doing well; dyspnœa inconsiderable, and no physical signs of pneumonic or pleuritic inflammation. His bowels having been costive, a mild cathartic was ordered.

May 16.—Still free from pulmonary inflammation; but he complains of pain in the epigastric and umbilical region. Emollient poultices were applied, and an anodyne administered at bedtime.

May 17.—Pain has discontinued, and patient is again in good spirits.

May 19.—Sent to general hospital. In the following July both of these patients were again on duty with their command.

Remarks.—Besides these cases, a number of others of a less serious nature presented themselves for treatment, nearly all of which recovered at the field infirmary and were returned to duty.

The limited experience derived from the treatment of these cases induces me to consider bayonet wounds as very simple injuries, readily healing by first intention, under favorable conditions.

Perfect tranquillity and continued application of cold water to the openings of exit and entrance are most essential. I found that the chest cases, though presenting a more extensive track than those of the hands, loins, shoulders, and hips, healed more rapidly, for this reason, that the slightly punctured patients would not obey my injunctions to keep quiet.

The sequelæ of bayonet wounds are not as serious as those of gunshot injuries. Not one of the men who received injuries of this kind, was rendered unfit for service. There was no exudation of superfluous lymph, no irregular gluing of muscular fibres, no permanent or even temporary contraction of muscles or tendons. Our knowledge of bayonet wounds has been so limited that their effects have been, until a recent period, involved in considerable doubt and even mystery. Experience, however, teaches that we have exaggerated the nature of these injuries, and attributed to them formidable qualities which they happily do not possess.

Why is it, that soldiers have such terrible fear of the

bayonet? Why is it that the determined approach of a line of glistening steel makes the cheek blanch and causes the bravest hearts to waver? Why do we in many battles witness the rout of lines that have unflinchingly withstood a continued galling fire of musketry and artillery, as soon as the opposing line approaches closely with fixed bayonets? This dread of "cold steel," is, in my humble opinion, mainly attributable to ignorance of the nature of the injuries inflicted by it. There appears to exist in the minds of men a vague dread of transfixion by the bayonet. But this would probably not be so, were it generally known that bayonet wounds are almost harmless, when compared to the ploughed tracks which the terrible minié bores through the tissues. The bayonet, on account of its less velocity, is easily diverted from a straight course by bony, cartilaginous, and tendinous tissues, and forms a smooth track, whilst the minié is relentless in its course, whirling with unimpeded force through all opposing structures, crushing, tearing, maiming all. A bayonet wound almost invariably heals by first intention under auspicious circumstances, and leaves no deformity behind, whilst the simplest ball wound requires weeks for a complete recovery, and then perhaps leaves the sufferer with a contracted and useless limb.

Original Lectures.

THE PRODUCTION OF MUSCULAR FORCE.

BEING REMARKS MADE

By Prof. J. C. DRAPER, M.D.,

AT NEW YORK MEDICAL JOURNAL ASSOCIATION.

MAY 31, 1867.

Mr. Chairman—Until a comparatively recent period, the opinion of Liebig that muscular force was the direct product and consequent of oxidation of muscle-fibre, was very generally received and adopted by the majority of physiologists of reputation. The urea of the urine was at the same time regarded as the result of this action, and therefore the quantity of this ingredient was supposed to be dependent on the degree of muscular activity. Impressed with this idea, about twelve years ago I undertook a series of experiments, in order to determine the amount of urea produced by various degrees of muscular action. The results of these experiments were altogether different from what was expected, and they were embodied in the form of a thesis, which was published in the *New York Journal of Medicine*, for February, 1856.

In this paper it was shown that there was no relation whatever between the quantities of urea and muscular action; and that a movement of thirteen miles on a level road, instead of producing an increase in the diurnal quantity of urea, actually caused a reduction; there being less urea secreted during the twenty-four hours in which the work was done, than during twenty-four hours in a state of rest, as is demonstrated by the following table:

	Quantity of Urine.	Solid Residue.	Urea.	1,000 of solid residue contain of Urea.
Standard,	1,106 cubic centimetres,	55·584 grs.	27·023 grs.	490.
Violent motion,	905 " "	52·081 "	25·472 "	488.

It had already been proved by Liehman, that variations in diet produced very great variations in the diurnal amount of urea, and I therefore concluded that urea was produced directly from the food, and was not the representative of muscular action; and that if muscle was disintegrated in order to produce force, the products of that disintegration were voided from the system by some other channel than the renal apparatus.

Bischoff and Voit soon after advocated the opinion that muscular force was not the product of the oxidation of muscular tissue; and the investigations of Edward Smith demonstrated that muscular activity increased the secretion of carbonic acid very considerably, while there was very little variation in the quantity of urea, as is shown in the following table:

Condition.	Carbonic Acid, per hour.
During sleep,	19 grains.
Lying down and sleep approaching,	28 "
Sitting posture,	29 "
Walking, rate 2 miles per hour,	705 "
" " 3 " "	1006 "

The doubt which was thus thrown on the theory of Liebig has been still further increased by the experiments of Drs. Fick and Wislicenus of Zurich, who advocated the opinion of Fraube, that muscular force is not in any degree dependent on the oxidation of muscular fibre, but is produced by the combustion of the hydrocarbons.

They regard a muscle-fibre as an apparatus or engine, in which hydrocarbons undergo oxidation, which results in the production of force and heat; and just as in an ordinary machine consisting of iron and steel, though the power is developed by the combustion of coal, there is a little wear and rust of the machine, so in muscle-fibre there is a similar small amount of disintegration of tissue, which may be represented by urea, or some other nitrogenized constituent of the urine.

The experiments on which these conclusions are based are of sufficient importance to justify a detailed account. They consisted in the ascent of one of the peaks of the Swiss Alps, known as the Faulhorn; the path chosen was the steepest that was practicable, and the height attained about 2,000 metres above the Lake of Brienze. In order to reduce the amount of urea to the lowest point, no nitrogenized food was taken for about eleven hours before the ascent was commenced. The average amount of nitrogen per hour during this period, which represented *night urine*, was for Fick, ·63 grains; for Wislicenus, ·61 grains.

The ascent was begun at $5\frac{19}{30}$ A.M., and was completed in about eight hours, during which time only hydrocarbons were taken as food. The excretion of nitrogen by the kidneys, was for Fick, ·41 grains, Wislicenus, ·39 grains per hour, and represented the *work urine*. The urine passed for five and a half hours after the completion of the ascent, and was also collected and designated as the *after-work urine*. It showed an excretion of nitrogen equivalent to ·40 grains per hour for Fick, and ·40 grains for Wislicenus. At the close of this period, which was at 7 P.M. on August 30th, a hearty meal, consisting mainly of nitrogenized food, was taken; and the urine of the succeeding ten and a half hours, *i. e.* to 5·30 A.M. of August 31st, collected. It gave for Fick ·45 grains, and for Wislicenus ·51 grains of nitrogen per hour, and represented the *after-work night urine*. Arranging these results in a tabular form we find:

Night urine,	Fick,	·63 grains.	Wislicenus,	·61 grains.
Work urine,	"	·41 "	"	·39 "
After work urine,	"	·40 "	"	·40 "
After work night urine,	"	·45 "	"	·51 "

During and after the period of labor the smallest

proportion of nitrogen was excreted, which agrees with the results that I published in the article previously mentioned.

On the data furnished by these results, Drs. Fick and Wislicenus argue that since Rauke and Shiry have shown that neither the perspiration nor the breath contained any appreciable amount of nitrogenized compounds, it would therefore appear that muscular force cannot be the product of disintegration of muscular tissue; but that the idea of Fraube is probably correct, and that we must regard the combustion of hydrocarbons as the true source of such force.

In order to place in a little stronger light the results obtained in their experiments, these gentlemen adduce an extended calculation to demonstrate that the oxidation of an amount of muscle-tissue equivalent to ·40 grains of nitrogen per hour, is altogether inadequate to the production of the power required to accomplish the work represented by the ascent of the mountain; and if the action of the heart and other muscles engaged in carrying on the functions of the body is taken into account, the work accomplished is at least three times greater than the utmost amount of force that could have been produced by the nitrogenized matter consumed. They therefore conclude, "that since the burning of nitrogenized material cannot be the only source of muscular power, it is not in any way concerned in its production; and considering the delicacy of a muscle-fibre it is not likely that different kinds of chemical processes should be employed to produce the same effect. Even steam-engines are not indifferent as to the material burned in them. In one made to burn wood, it would not do to use coal. How, then, is it possible to conceive that the muscle-machine was constructed especially to consume nitrogenized material, and that when enough is not to be had, it puts up contentedly with non-nitrogenized fuel? That it does make use of non-nitrogenized material, we have by our own experiment proved, beyond a doubt. We therefore conclude that, *since the muscle machine can be heated by means of the non-nitrogenized fuel, this fuel is in all cases that best suited for it.*"

For additional support to this doctrine, attention is drawn to the care with which the digestive apparatus of ruminants is adapted to the digestion of cellulose, a non-nitrogenized body; and to the fact that animals of great strength and swiftness subsist on food containing very little albuminous matter. The statement of Dr. Piccard is also cited, that the chamois-hunters of Switzerland, in their expeditions, take with them, as provisions, nothing but bacon-fat and sugar, having found by experience that they answer their purposes for a time better than meat.

The experiments of Dr. Zalesky, given in the *Lancet*, for March, 1866, show that on removing the kidneys the amount of urea in the blood is not increased, but on ligating the ureters it increases very rapidly, which goes to prove that urea is not the product of muscle disintegration, but is formed in the kidney. This conclusion favors the opinion of Fick and Wislicenus, that muscular force is the result of the oxidation of non-nitrogenized matter only, and that combustion of albuminoid bodies has nothing whatever to do with it.

Dr. Zalesky, in connection with these experiments, draws the important conclusion, that since the kidneys form the urea, the so-called uremic accidents that occur when the secretion is suppressed, are not due to the presence of urea in the blood, since that substance is not produced under such circumstances, but that the poisoning is the consequence of the non-separation of some of the constituents of the extractive group.

From this momentary digression we revert to the discussion of our subject, by referring to an article published in the *Philosophical Magazine* for Sept., 1866, by Professor Frankland, in which he first notices that the experiments of Fick and Wislicenus lose a portion of their importance on account of the fact that the amount of actual energy generated by the oxidation of a given weight of muscle in the human body, is unknown; and that there were no accurate data of the heat of combustion of muscle, nor of its nitrogenized residue, urea. This missing link Prof. Frankland proceeds to supply by means of a series of experiments with the calorimeter of Lewis Thompson; the combustion being accomplished by means of chlorate of potassa. The results are expressed in *heat units*, each of which is equal to one grain of water raised through 1°C of temperature, while the mechanical equivalent of heat is that of Joule, in which 1 kilog. of water raised 1°C, — 423 metre kilogs. They are as follows:

Substance dried at 100° C.	Average heat unit.	Average metre kilog of force.
Beef muscle washed with ether	5,108	2,161
Purified albumen	4,998	2,117
Beef fat	9,069	3,841
Hippuric acid	5,383	2,280
Uric acid	2,615	1,108
Urea	2,206	934

It is to be remembered that the amount of actual energy produced in the body is less than that given in the above table; for under these circumstances the oxidation is not complete, urea being produced instead of carbonic acid, water and nitrogen; and since dry muscle yields one-third its weight of urea, the amount of energy produced in the body can only be for "Beef muscle washed with ether," heat unit 4,368, metre kilogs of force, 1,848.

Applying this result to the experiments of Fick and Wislicenus, and allowing for the fact that probably at least half the oxidation was lost as heat, Prof. Frankland finds, that "scarcely one-fifth of the actual energy required for the work performed could be obtained from the amount of muscle consumed."

Though Prof. Frankland admits the truth and force of the experiments of Fick and Wislicenus, he by no means admits that non-nitrogenized articles alone are consumed to produce force; for he states that the nitrogenized also, inasmuch as they are combustibles, and consequently capable of furnishing actual energy, might be expected to be available for the same purpose; and such an expectation is confirmed by the experiments of Savory upon fats (*Lancet*, 1863, pages 381 and 412), which show that these animals can live for weeks in good health upon food consisting exclusively of "muscular fibre." The conclusions finally drawn from an extensive series of experiments are announced by Prof. Frankland as follows:—

"1st. A muscle is a machine for the conversion of potential energy into mechanical force.

"2d. The mechanical force of the muscles is derived chiefly, if not entirely, from the oxidation of matters contained in the blood, and not from the oxidation of the muscles themselves.

"3d. In man the chief materials used for the production of muscular power are non-nitrogenized; but nitrogenized matters can also be employed for the same purpose; and hence the greatly increased evolution of nitrogen under the influence of a flesh diet, even with no increase of muscular action.

"4th. Like every other part of the body the muscles are constantly being renewed, but this renewal is scarcely perceptibly more rapid during great muscular activity than during comparative quiescence.

"5th. After the supply of sufficient albuminoid mat-

ters in the food of man to provide for the necessary renewal of the tissues, the best materials for the production both of internal aud external work are non-nitrogenized matters, such as oil, fat, sugar, starch, gum, etc.

"6th. The non-nitrogenized matters of food which find their way into the blood, yield up all their potential energy as actual energy; the nitrogenized matters on the other hand leave the body with a portion, at least one-seventh, of their potential energy, unexpended.

"7th. The transformation of potential energy into muscular power is necessarily accompanied by the production of heat within the body, even when the muscular power is exerted externally. This is doubtless the chief, and probably the only source of animal heat."

Comparing these conclusions with those of Fick and Wislicenus, we find that while the first are stated at greater length, they only differ from the latter in supposing that nitrogenized substances can be and are employed in the muscles for the production of force.

In a paper on Insensible Perspiration, read before the Academy of Medicine, May, 1864, and which was based on a long series of experiments, I arrived at the conclusion, that the effete material arising during the production of muscular force, was evacuated as nitrogen, by the skin and lungs, and not as urea, by the kidneys. The experiments of Prof. Frankland do not militate against this opinion.

There still remains one element in the problem to be yet solved: it is the variation in the proportion of sulphates excreted during rest and motion. To this I hope to devote some time during the ensuing summer. If it is found that violent muscular action produces a corresponding increase in the amount of sulphates, it will tend to show that muscular tissue does undergo disintegration during the period of activity; while, if it is not materially increased, the conclusions of Fraube, Fick, and Wislicenus will be demonstrated beyond peradventure, and we shall be obliged to accept the doctrine that muscular action is the product of oxidation of non-nitrogenized material alone.

Cysticercus in the Brain.—Dr. John Harley reported (*Lancet*) an interesting case, in a pathological point of view, to the Medico-Chirurgical Society, illustrating the development of the larval form of the common tapeworm in the substance of the brain, about sixty cases of which are on record; the affection is, therefore, a rare one. The subject of the present case was a healthy boy, fifteen years old. He died of acute rheumatismal pericarditis and encephalitis, after a week's illness. Only a solitary larva was found in the body, and this was imbedded in the right corpus striatum and slightly projecting into the ventricle. The cyst was no larger than a pea, and contained within its interior the retracted head and neck of the parasite. The species was distinguished by the large size of the great curvature and the strong bases of their hooklets, and by the development of dark violet pigment granules about the hook sacs. The boy had always enjoyed good health, and the only evidence of cerebral disorder was manifested during the last two months of his life. It consisted of frontal headache and an uncontrollable tendency to sleep—symptoms which were probably caused by the presence of the parasite.

Wet-Nursing in France.—A petition has been presented to the French Senate asking that all mothers be compelled to nurse their own children.

Jager, the distinguished German oculist, recently died at Vienna, aged eighty-four years.

Reports of Hospitals.

JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

CLINICS OF PROF. GROSS.

OSTEO-MYELITIS—TRIPLE AMPUTATION IN CONTINUITY OF HUMERUS AND AT THE SHOULDER-JOINT.

Mrs. F——r, æt. 43, much older looking, very much emaciated by suffering, not weighing over 70 lbs., was sent to the clinic April 17, 1867, by Dr. K——r, for what was at first supposed to be an ordinary case of inflammation of the elbow-joint resulting in anchylosis, with more or less implication of the bone. Two years ago this patient fell upon the curbstone striking her left elbow, which had been stiff ever since the accident. The elbow was a good deal swollen, very painful, and presented a number of openings communicating with the articulation, from which there was a good deal of discharge; some spicula of bone had been discharged at times. The general health of the patient was not good, and she was suffering from the remains of a diarrhœa. The patient was ordered some tonic treatment, and told that were she strong enough, her arm would be amputated as the only means of procuring relief; but the poor woman begged so hard to have the limb removed at once, and thus be put out of suffering, that Prof. Gross consented to perform the operation. Chloroform was carefully administered, and at the moment of anæsthesia, the arm was removed by flap operation at its middle; but the moment the saw entered the bone it sank into the medullary cavity, showing that a more serious state of affairs was present than had been anticipated, and therefore on its removal, the stump was immediately amputated high up, without waiting to renew the anæsthesia, which had gone off. Here again the same condition prevailed, and it was found that the entire bone was diseased, whereupon a third amputation was immediately performed at the shoulder-joint, digital compression controlling the subclavian. This last was under peculiar difficulty from the extreme shortness of stump left by the two previous amputations. The flaps were taken from the wasted deltoid, and the great pectoral and broad dorsal muscles. The entire humerus was diseased, the head of the bone crushing under moderate compression between the thumb and forefinger. The glenoid cavity was not involved, and there was therefore hopes of recovery, if the patient should get over the shock, for the last two operations were not performed under anæsthesia.

The patient was placed under the influence of tincture of the chloride of iron with quinine, and milk punch, with a nutritious diet; and promptly recovered without a single untoward symptom, improving in flesh and strength during the union of the flaps.

FISTULE IN THE ANUS.

Wm. G——r, æt. 48, by trade a tailor, presented himself to the clinic, Dec. 29, 1866. About eleven weeks ago his attention was called to an anal abscess, which was very painful, and in about three weeks opened without surgical interference, the discharge not being very great. The result has been the formation of an anal fistule.

There are two kinds of abscesses at the verge of the anus; one is phlegmonous, similar to the abscess liable to form in any other part of the body. The symptoms of such an abscess are acute, well characterized, and the

pus is of a peculiar consistent character, containing an immense number of globules, comparatively little fatty matter, and it is of a whitish cream-like appearance. Then there is a strumous, scrofulous, tuberculous, or chronic abscess, which is liable to form in this situation in persons predisposed to consumption, or who are laboring under that affection, who labor under this peculiar strumous or scrofulous diathesis,—not liable to form in all persons any more than pulmonary consumption is liable to form in all constitutions. A person must have a predisposition to the formation of such an abscess, or else it could not take place, and it is frequently attended with a tuberculous deposition in the follicles of the mucous membrane of the rectum. This tubercular matter gradually softens, disorganization ensues, and at length an ulcer forms which becomes a source of irritation; this irritation is gradually transferred to the tissues around,—and finally there is gradually formed an abscess of the character mentioned. The patient before the class had, from the account given of his symptoms, a phlegmonous abscess, for he has not had cough, shortness of breath, night-sweats, or loss of flesh, and his tongue is clean, and his bowels regular.

In examining such a case, we insert a grooved director along the tract called the fistule, at the same time passing the finger of the other hand into the interior of the bowel; the patient being on his elbows and knees, the head low down, and the knees forward, the legs being widely separated; for in this manner the breech is fairly presented. The opening in the present instance is larger than the barrel of a goose-quill, and readily receives the point of the instrument, which passes readily into the rectum. There is but one track. It is therefore what we call a complete fistule in the anus.

There are two forms of *incomplete fistules* in the anus; one in which there is an external opening leading up to the bowel, but not into it, not passing through the wall of the bowel; this is called an external incomplete, or an external blind fistule:—then there is an internal fistule in which the opening passes from the interior of the bowel into the connecting cellular tissue around the tube, not communicating with the skin, and consequently not opening on the external surface; this is called an internal incomplete, or internal blind, or internal occult fistule.

The *complete fistule* is that variety most frequently met with, and here there is a direct passage from the external surface into the interior of the bowel. There may be but one external opening, or there may be two, three, five, or seven, so that the surface around presents a cubriform or perforated swivel-like appearance. Generally there is but one opening, which is either at the side, as in the present instance, or in front towards the scrotum, or behind towards the coccyx. When there are several external openings they generally communicate with the main sinus; but sometimes they open separately into the interior of the bowel. This internal opening is usually single; although sometimes there are two, sometimes three; but this is uncommon. Then, this internal opening is situated immediately above the internal sphincter muscle, at the height of about four and a half to six lines above the verge of the anus, sometimes not more than three lines; not situated high up, as was formerly supposed by the older pathologists and surgeons, at the distance of from one to two or three inches, but just above the verge of the anus.

In former times *the operation for anal fistule* was a most barbarous, cruel, and painful one, and even a dangerous one, in consequence of the supposition on the part of the surgeons, that the internal opening passed high up, for the bowel was slit open to that extent, a proceeding frequently dangerous on account of the resulting hæmorrhage, and the cure was always protracted in consequence of the severity of the operation. It remained for Kiper, an eminent French surgeon, to place this part of pathology in its true light, by showing that the internal aperture always exists just above the verge of the anus, or just above the true sphincter muscle at a distance from three to five lines, and sometimes, as an exception to the rule, even to the distance of an inch.

When there are a number of external openings, as not unfrequently happens in cases of long standing, then the parts are callous from interstitial deposits of plastic matter, usually more or less in a state of irritation, or even constant inflammation, attended with a great deal of discharge of mucus, and often fæcal matter.

The *diagnosis* of an affection of this kind can always be readily determined by a careful exploration of the bowel; the contents having been cleared out as a preliminary step by some slight laxative the previous evening, or by means of the enema.

If the patient be a female, she is placed upon the side in bed; if a male, in the position already described; the fore-finger, well oiled, is then carefully inserted, by a sort of rotary movement, into the bowel, and then by separating the parts, you look for the external opening, whose situation is frequently indicated by the existence of a little papule, a sort of nipple-shaped projection—nothing, however, but a mass of granulations; then you pass your probe into the centre of that, and at once it proceeds along into the main channel.

Performing the operation with a sharp probe-pointed bistoury, you introduce the finger into the bowel, then insinuate the probe-pointed bistoury along the fistule, and when the point of the instrument comes in contact with the finger in the bowel cut from within outwards, in this way withdrawing the finger and instrument at the same time.

This is not the way in which we now perform this operation. We employ here a process much more simple, and by which a man may operate in the dark without any difficulty. The grooved director is pushed through the fistule, and brought out across the opposite nates, exposing the whole thing, and then the trach is slit open with the knife.

As the case before us is a recent one, it is not necessary, after the operation, to pare the edges of the incision; an operation which should never be neglected when the parts are callous, indurated, and irregular. A well-oiled tent of patent lint is introduced into the wound with the object of making it heal from the bottom by the granulating process. The tent is to be retained for forty-eight hours and then removed, and it need not be replaced by a fresh one. The bowels should be locked up for at least three days, keeping the parts in a quiescent condition; then an enema may be administered, or what is generally preferable, a dose of castor-oil, or an ounce of sulphate of magnesia, or a portion of rochelle salts, etc.

The patient should observe great cleanliness, the parts should be washed after the removal of the tent several times in the twenty-four hours. The diet should be simple, nutritious, and not calculated to distend the alimentary canal habitually; and thus the treatment is continued until the patient gets well, in from a fortnight to a fortnight and a half after the operation.

A male infant, æt. 9 months, was brought to the clinic April 17, 1867, with an *anal fistule* which commenced three months previous in an abscess. There

were three external openings, one upon the right side and two upon the left, there being complete anal fistule upon each side. One of the fistules in the left side was divided, and the other was not disturbed, in the hope that repose of the sphincter would permit the other to heal up without interference.

This case is interesting on account of the tender age of the patient, for anal fistule rarely occurs so early in life.

Progress of Medical Science.

Bromide of Potassium in Functional Epilepsy.—Dr. C. L. Hubbell, of Troy, N. Y., in an article on some of the uses of bromide of potassium, published in the *Boston Med. and Surg. Jour.*, relates several cases of functional epilepsy treated by this salt. He administers it in solution, in the proportion of 3 i of the salt to three ounces of water, the dose being a teaspoonful after each meal.

The Treatment of Menorrhagia.—A recent number of the *Lancet* gives a very interesting account of the treatment of menorrhagia, as carried on by the gentlemen connected with the out-door department of the several London hospitals. When we take into account the number of organic troubles of which menorrhagia is but a symptom, we can easily conclude that its treatment must depend upon a variety of circumstances. The number of cases which present themselves, and the dispatch which is necessary in prescribing for such, has given rise to a certain routine, which, considering the practical results obtained, is of value.

Dr. Greenhalgh (St. Bartholomew's Hospital), assumes that the majority of cases of menorrhagia are due to fibroid, or fibrous out-growths or in-growths from the uterus. These are mostly treated by a pill composed of one-twelfth of a grain of bichloride of mercury combined with quinine and belladonna, to which are frequently added small quantities of the aqueous extract of aloes, taken night and morning for some weeks; a mixture composed of dilute sulphuric acid, tincture of Indian hemp, mucilage, liquid extract of ergot, syrup and infusion of quassia, three or four times a day, being ordered just prior to and during the catamenial flow. Between the "periods" a draught of iodide or bromide of potass, with the liquid extract of ergot, sal volatile, and infusion of quassia, is given twice a day. If the loss of blood has been very great, or the patient be anæmic, the tincture of sesquichloride of iron with the liquid extract of ergot, chloric ether, syrup, and infusion of quassia, twice or thrice a day, with the pills, are prescribed. Where the patient is more or less plethoric, which is rarely the case, the sulphate of magnesia and digitalis, either with dilute sulphuric acid or salines, and scarifications or leechings of the cervix uteri, are found most serviceable. In cases of subinvolution of the uterus, attended with menorrhagia due to imperfect recovery from labor or miscarriage, hyperlactation, or other affections leading to constitutional debility, especially in the strumous habit, the syrup of the iodide of iron, with or without ergot, and with the pill above referred to, are found very efficacious. A similar course is pursued, sometimes with, sometimes without, the pills, where the commencement of malignant disease is the exciting cause of this symptom. In cases of Bright's disease and other affections interfering with the stasis of the blood, gallic or tannic acid, usually combined with henbane, prove valuable hæmostatics; some preparation of iron with arsenic being usually ordered between the "periods." Where polypi, portions of retained ovum, or fibrinous clots are detected, they are removed.

Dr. Greenhalgh particularly draws attention to the frequency of menorrhagia as the result of collections of fæcal matter in the large intestines and rectum, and of hepatic derangements occasioning mechanical irritation and congestions of the hæmorrhoidal vessels and uterus. For calculi, in addition to the pills, he prescribes repeated doses of the compound decoction of aloes, with tincture of nux vomica.

In all cases he recommends quiet of mind and body; rest in the recumbent posture; nutritious and unstimulating diet; cold acid drinks; tepid or cold water vaginal injections; great moderation or total abstinence from sexual excitement. He now and then has recourse to the following means:—Matico-cotton plugs or pessaries; astringent vaginal injections; sponge tents; iodide of lead, and atropine pessaries; iodised cotton; Hodge's and other pessaries in cases of misplacements of the uterus, etc.

Dr. Greenhalgh adds that, *cæteris paribus*, menorrhagia is more prevalent among women of lax fibre, more especially if they have had many children or abortions, in rapid succession; in those subject to acne, pruritus, or eczema, and about the climacteric; in those of intemperate habits of various kinds, etc. He considers it is by no means always easy to determine whether the case is one of menorrhagia or threatened abortion.

Dr. Grailly Hewitt (University College Hospital) has little faith in mere palliative remedies, but thinks that the treatment should be mainly directed to remedying the organic conditions which he considers are almost invariably present. He does not, however, underrate the cold vaginal douche, rest during the period, and the administration of ferruginous compounds, and also ergot in powders (3 ss three times a day).

Dr. Murray (Great Northern Hospital) is in the habit of treating functional menorrhagia by the combined use of gallic (grs. v–x) and dilute sulphuric acids (gtt. xv–xxv), principally with as much rest as can be obtained. This treatment may continue for a period extending over two months. He has occasionally found mustard over the sacrum every other night, or even a blister, of service in that form where after childbearing a large uterus, with a patulous os, is continually pouring out blood, and every now and then doing so in gushes, accompanied with clots. He also advises the application of cold water in the lower part of the spine in cases of continued discharge (not leucorrhœal) between the periods. He has not found the use of iron at all satisfactory. Enemata of cold water have been useful, especially at those moments when the gushes of blood with clots take place, a gentle non-irritating purgative being also given.

Dr. Parson (Charing-Cross Hospital) favors an astringent mixture composed of tannic acid (5 to 10 grains), dilute sulphuric acid (10 to 30 minims), and the fluid ext. of ergot of the British Pharmacopœia (5 to 10 min.), every four or five hours for the first few days. If there is much pain, 5 to 10 minims of tinct. of Indian hemp are added to each dose. Iron is only administered when the tendency to excessive flow has ceased.

The treatment employed by the above physicians applies of course mainly to functional menorrhagia; but when the discharge is dependent upon organic troubles the indications depend upon the character of the lesion that may be present, the satisfactory termination of the case depending in all such instances upon the removal of the cause.

Oil of Petroleum, says the *Union Médicale*, is a powerful agent for the destruction of insects. The crude

oil is the best for the purpose. A few *grammes* of petroleum diluted with water, and sprinkled by means of a watering-pot over strawberry plants, destroys the *maus*, or "white worm of the beetle" which infests those plants. The crude oil mingled with a large proportion of water is a sure poison for crickets. The mixture is to be poured through a funnel into the holes frequented by them. The *acarus scabiei* is very promptly and radically destroyed by inunctions with the oil. Frictions with petroleum water (60 gr. par litre) immediately cleanse the domestic animals of the parasitic insects which annoy them. The animals should be washed with soapsuds a few minutes after the friction. It is also stated that a house infested with rats and mice was freed from these guests a little while after the introduction of a large quantity of the oil into the cellar.—*Boston Med. and Surg. Journal.*

Chloroform to the Dying.—Dr. Joseph Buller, Physician to the Royal South Hants Infirmary, in an article with the above caption in the *British Medical Journal*, makes some interesting remarks upon the propriety of administering chloroform to the dying. The cases to which its use, in his opinion, seems applicable, are those in which there are extreme restlessness and sleeplessness, accompanying the exhaustion of the last days or weeks of the life of the very aged, especially when (as is often the case) the mental consciousness is still active and the failure of power in the vital organs is actually felt, with none of that physical courage to bear the suffering which the same patients had when younger and stronger. At this time opiates seem useless; in fact, all efforts towards alleviation of the distressing symptoms seem utterly futile without the anæsthetic. From some cases that he records as having come under his personal observation, it would seem that the chloroform, properly regulated, acted as a nerve stimulant, quieting pain, but still not interfering with the process of intellection.

Extraction of a Glass Bottle from the Rectum.—The following remarkable case was admitted into Darlington Hospital, under the care of Dr. Howison:

T. W——, aged thirty, a workman in the gas-house, was with some companions amusing himself with jumping over bottles placed above each other with their small ends uppermost. After he had in his turn jumped over the bottles, the top one was missing, and it appeared to have passed through a thin pair of flannel trousers into the rectum. The man, a patient of Dr. Howison, was brought to the hospital next morning. He gave very little appearance of anything being the matter. Immediately after the accident he felt very sick and faint. He went to bed, after trying to protrude the bottle. On his admission, the base of the bottle was found at the extremity of the ascending colon, though, from his description of its situation, soon after the accident, it was just about the junction of the transverse and descending colon. An injection of warm soap and water was at once given. This had the effect of bringing the bottle within extreme reach of the finger. Dr. Marion Sims' vaginal speculum was used to expand the rectum, and after several attempts to seize and draw it out by a pair of œsophageal forceps, it was at length expelled in a great measure by the action of the bowel, assisted by manipulation. With the exception of the pain experienced in expanding the rectum, the extraction gave the patient little uneasiness, and he walked home seemingly very little the worse. He was directed to remain in bed for a day, and very soon recovered. The bottle is a castor-oil bottle, such as is usually sold by druggists, and is eight inches long, four inches round at the thick extremity, and one inch and a half round the neck. It is rather curious that the bottle should have been plumped down upon so exactly at the anal orifice as to pass up without much pain. What the consequences would have been had the bottle broken in its passage, it is rather unpleasant to conjecture.—*Lancet.*

An Ingenious Bullet Detector.—A very ingenious piece of mechanism for the detection and extraction of bullets in wounds has been devised by Mr. Sylvan De Wilde. It seems that at the time Garibaldi was suffering from the effects of an undetected bullet in his limb, and pained by the fruitless efforts of operators to detect it, it occurred to several individuals of a philosophic turn of mind that electricity might very well be employed in the detection of metallic substances lodged within the human tissues. In France, M. Edmond Langlois, M. Favre, and Dr. Lecompte of the French Army Medical School at Val-de-Grâce, assisted by M. Rhumkoff, all made use of it in the elaboration of suggestions on the point. There is this manifest advantage, that the structures of the body are non-conductive—a fact that renders the action of the electric current more perfect.

Mr. De Wilde has apparently produced the most practical result: and his instruments have been submitted to the naval and military authorities, who have made a complimentary report about them. The apparatus consists of a probe and forceps, a battery, and an alarum, contained in a box eleven inches long by three broad, and two inches and a half deep. The elements for the generation of a current, which remains constant for some weeks, are zinc and carbon. The probe, consisting of two steel wires, insulated from each other, is connected with an electric horse-shoe magnet and a bell, and when (introduced into the wound) it touches the bullet the circle is completed, and the bell rings. The forceps act on the same principle, and are intended first to detect, then to seize, the bullet. They have curved points, and not pallets or spoons. The points of the probe are kept sheathed on introduction to a wound, and not uncovered till the supposed bullet is felt. This is effected by means of a sliding tube. The advantages of Mr. De Wilde's probe over others of its kind are very marked, and the army and navy officers will no doubt find it a great aid. The probe is a sensitive artificial finger, which enters deeply into the tissues, and gives the signal at once when it detects the hidden source of mischief below.—*Lancet.*

Puerperal Peritonitis treated hypodermically with Morphine.—J. H. Beech, M.D., in the *Detroit Review of Medicine and Pharmacy*, after relating the history of a case of Puerperal Peritonitis, says: "Having seen no report of hypodermic treatment of Puerperal Peritonitis, I conceive that this may encourage others to give it a trial. It will be observed" (in the history above mentioned), "that no efficient medicines were retainable by the stomach, except hyd. chl. mit. grs. iij. and morph. sulph. gr. i. very early in the attack, and no efficient use of enemata was secured until the danger had subsided, while the effect of the hypodermic injections was well marked and salutary. Do others find that this method of using morphia constipates, or even restrains the bowels? Some other cases have led me to think that it affects them very little, if any."

Tetanus Caused by Subcutaneous Injections of Quinia.—The *Gazette Hebdomadaire*, of the 28th June, mentions that two patients, one an adult and the other a child, died recently from the effects of quinia injected subcutaneously for the cure of intermittent fever. The same journal also alludes to a case of tetanus attributed to the same cause, reported in the *Southern Journal of Medical Sciences*, and copied into a British journal.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—TEPHENS Y CA.

New York, August 1, 1867.

PRESCRIBING APOTHECARIES.

EVERY young graduate who, for the first time, feels that he is legally entitled to the appellation of Doctor of Medicine, rightly concludes that he by it should be distinguished from others not so fortunate. When, however, he has become engaged in the active duties of his profession, he is very soon undeceived, and becomes aware that the title is an exceedingly cheap one; that the man who concocts some patent vegetable pills with singular cure-all properties, who manufactures a hair-dye, a pile ointment, a youthful invigorator "for declining manhood," or who invokes the aid of spirits in the selection of a particular herb to meet his patient's case, or who is content to dispel disease by some miraculous touch, is not by name to be distinguished from him. But there is even a comfort in the thought that all such are the most pitiable of charlatans, and that the motives which actuate them in the performance of such deeds are either pardonable on account of the imbecility of which they are the offspring, or are in their wickedness too despicable for honest contemplation. He is in fact prepared to pity the one or despise the other; and in this he is upheld by the sensible portion of the general community.

There is, however, a distinct class of these pretenders to the title who, from their position, are more apt, by a too credulous people, to be voted the right to use the trademark of the profession and stamp the same upon all their doings; we refer to the apothecaries. If any one would undertake to examine into their motives for appropriating the name and assuming the privileges of the well-qualified and licensed physician, it would not be found very difficult to arrive at a result by no means creditable to the probity of the guilty party.

A well-educated and well-behaved apothecary is so indispensable to the physician, and the mutual relations which should exist between the two are so peculiar, that they cannot, in the interest of both, be too jealously guarded. For the most part, the regular pharmaceutists are men of integrity, learning, and sterling worth, but they form altogether too small a majority.

We do not propose to canvass all the little devices which our druggists are guilty of to catch a penny, or the very questionable and reprehensible little practices of abetting quack advertisements, and sundry other little things which they so naïvely acknowledge to be "tricks of the trade," but we cannot longer delay a reference to a practice which is as rife among them as it is disgraceful, viz. that of prescribing for those who may call at their shops for advice.

As soon as the merest shop-boy becomes employed around a drug-store, he earns for himself the appellation of doctor, and is at once looked upon by his associates and acquaintances as one versed in the arts of cure. He is at first staggered with the title, but as the simple result of being in the habit of hearing it coupled with his name, he becomes so accustomed to it that he tacitly acknowledges his right to it, and commences to govern his acts accordingly. After he graduates from his first position and is able to compound a prescription, his title becomes unquestioned, and whenever occasion offers he embarks in the practice of physic with an audacity that is really amusing. The very excellent opportunities they have of flattering a dangerous pride are too great for most of these so-called "drug-store doctors" to withstand, of giving a little advice along with a little medicine, and not unfrequently they become the Courts of Appeal for a patient who may not exactly understand why his physician prescribes this or that article.

We speak advisedly when we affirm that the number of shops in this city in which this abominable, disgraceful, unprofessional, and dishonorable practice of indiscriminate prescribing is forbidden, can perhaps be fixed at a dozen or two. The time has come when a physician can hardly enter any of these so-called respectable metropolitan stores without his professional character being insulted by the most impudent and ignorant pretensions of some stripling knight of the pestle, who does not hesitate, under any circumstances, to prescribe for anything which may come along; and if perchance he should insist upon the propriety of seeing the patient first, and not run the trifling risk, so to speak, of taking the word of a messenger, it is a species of refinement in drug-store practice very seldom indulged in. This statement would under ordinary circumstances appear paradoxical in view of the oft-repeated assertions of these individuals concerning professional honor, and other similar phrases, of which they are nowadays so willingly ignorant.

We are inclined to be charitable enough to suppose that it is not altogether the fault of these prescribers that they have patients; in other words, that they hardly solicit patronage; but when we have said thus much, we have given them all the extenuation which they deserve. When we contemplate the deliberate act for which they alone are accountable, that of complying with what, on the face of it, is a request they know is improper, our charity for the apothecary fails us. He

may be solicited to give advice; but knowing, as he must, that the giving of it is wrong, not only to his would-be patient, but to the profession whose confidence he outrages, he has no excuse to urge for so doing.

There are many aspects in which this subject of indiscriminate prescribing may be viewed in relation to the injurious influence it must exert upon the profession, not the least of which is the cheapening of the services of competent physicians—men who have to depend for a living upon professional fees, and who have, perhaps unfortunately for themselves, no drugs to dispose of, and thus strike a balance to their credit. Many apothecaries are wont to swell their honest bosoms with proud contempt at the idea that many physicians would stoop so low as to receive a percentage upon their prescriptions, yet while making these pharisaical demonstrations, they are cheating the honest practitioner out of many a legitimate fee.

If our apothecaries were educated to prescribe, as is the case with those of Great Britain, for instance, the matter could safely be trusted in their hands; a certain class of cases would then naturally drift into their way, and no one would be injured. But as the case now stands, these individuals are practising under false pretences; and on account of this, and of the evils which naturally grow out of it, the professional man has a right to demur.

It will be perceived, by reference to the action recently taken by the East River Medical Association, that a movement is about being made in the right direction by calling the attention of apothecaries to the impropriety and danger of repeating prescriptions without the physician's authority. Let them heed this, and the next step will be expostulation against the appropriation for their own purposes of the prescriptions of such physicians as may send their patients to their shops. These recipes are too frequently used as specifics for certain diseases, and the patients are made aware of the fact that this is Dr. A's or B's favorite recipe for a particular disease. If this practice were confined to a few of the drug-stores, it would hardly be a matter of much importance; but considering its great prevalence, it becomes the profession to concern itself in reference to some practical measures for protection against such fraudulent dealings.

We have received a copy of a circular which has been addressed to all Universities, Colleges, Schools of Medicine, and Medical Societies in Canada, requesting them to send delegates to a convention which is to assemble at Quebec on the 9th day of October next, for the purpose of aiding and coöperating in "the protection of the interests, the advancement of the knowledge, and the extension of the usefulness of the medical profession of Canada."

As the Union of the Provinces of Canada, Nova Scotia, and New Brunswick, is effected, and united Legislative and Executive action thus secured, it seems essential that there should also be uniformity in the laws which regulate life and health, and especially those relating to the exercise of the medical profession, Accordingly, at a meeting of the medical profession, held on the 18th of June last, at the "Laval University" in the city of Quebec, the following action was had:

Resolved, 1. That in the interest of the public, and the medical profession, it is desirable to adopt such means as will insure a uniform system of granting license to practice Medicine, Surgery, and Midwifery, throughout the Dominion of Canada.

Resolved, 2. That in future, all medical degrees or diplomas, of Universities, Colleges, or Schools of Medicine, shall have merely an honorary value, and licenses to practise Medicine, Surgery, or Midwifery, in the Dominion of Canada, shall be granted by a Central Board of Examiners, in each Province, before whom all holders of Degrees in Medicine, or Diplomas for Surgery or Midwifery, shall appear for examination.

Resolved, 3. That a committee of seven members be named by the Medical Society, to confer with the various Universities, Colleges, and Medical Schools in Canada, on the subject of the establishment of a Central Board of Examiners, before which all candidates for license to practise medicine in the Dominion of Canada shall be examiued.

Resolved, 4. That the Quebec Medical Society recommends the calling of a Convention of Medical Delegates, from Universities, Colleges, Schools, Medical Societies, &c., in the Dominion of Canada; to meet at the city of Quebec, on the second Wednesday in October, 1867, for the purpose of adopting some concerted action, on the subject of medical legislation, in conformity with this report, and for the formation of a "Canadian Medical Association."

The whole respectfully submitted.

W. Marsden, M.D., Chairman.
R. H. Russell, M.D., Secretary.

Laval University. Quebec, 18th June, 1867.

The above resolutions were unanimously adopted, and are to be submitted to the medical profession of Canada, at the proposed Convention in October next.

There is a movement also on foot in Canada to establish an efficient and general system of quarantine in accordance with the enlightened views of the authorities on the subject, and in keeping with those already expressed in these columns. As under the "Federal Union" of Canada the quarantine and marine laws will necessarily come under the federal control, and not the provincial and municipal, as unfortunately is the case in the United States, we trust that it will be adopted by the Central Government; and we know no person whose qualifications so preëminently fit him to be placed at the head of Quarantine and the sanitary laws of the kingdom, as William Marsden, M.D., of Quebec. His long and invaluable services in connexion with these subjects, both in Canada and the United States, richly entitle him to such distinction; and we are satisfied not only that the medical profession of Canada, but of our whole country, would hail such an appointment with approbation as one most fit and proper to be made.

Reviews.

TREATMENT OF FRACTURES OF THE LOWER EXTREMITY BY THE USE OF THE ANTERIOR SUSPENSORY APPARATUS. By N. R. SMITH, M.D., Professor of Surgery in the University of Maryland. Baltimore: Kelly & Piet. 1867. 8vo. pp. 70.

THE purpose of the monograph before us is to illustrate the good effects of a particular kind of treatment of fractures of the lower extremities, more particularly of the thigh, as well as other injuries of those parts which require absolute rest. The profession during the past few years has had presented to it, by American Surgeons, many devices for the accomplishment of this end, and many of them are, as has been abundantly proved by experience, excellent of their kind. In fact, the proper treatment of fractures has become an American specialty; and by foreign surgeons our results have been considered so surprisingly good, that they are willing to be instructed by us in this most important department of our healing art. The investigations into the nature of the injuries have been so carefully made, and the ingenuity of the American has been so often taxed to meet the indications, that it would be remarkable if great progress had not been attained by us in this branch. But of the number of splints that have been invented, while they plainly show a fertility of resource that is remarkable, comparatively few have outlived the test of experience in their employment. In this latter respect, Prof. Smith's will hardly prove to be a notable exception.

Let us in a cursory review of the contents of this little book ascertain for ourselves the soundness of those views upon which the author founds his practice.

The author, in the first place, affirms that there is a source of deformity and shortening, especially in fractures of the thigh, which has been very much overlooked; and that is a tendency in all such injuries, when the patient is in a recumbent position of the trunk, to slide toward the foot of the bed. This is partly attributable to the yielding of the bed, and partly to the impossibility of fixing the trunk and limb in a relatively immutable posture, without the most intense suffering on the part of the patient. The proper relations of the trunk with the fractured limb being then lost, it naturally follows that the fragments are proportionately disturbed in such a way that the upper one is made to overlap the lower. Assuming this to be true, which he claims he has a right to do from oft-repeated and careful observations, he maintains that "the objects to be attained in fractures of the lower extremity are: 1st. To furnish a surface of support which shall be accurately and permanently adapted to the surface and form of the limb which reposes on it. 2d. To so adapt the surface of the support, as that the limb sinking into it shall maintain its form by its own weight, without the necessity of any lashings here and there to secure it to the rigid portions of the apparatus. 3d. To make the limb obedient to all the unavoidable movements of the trunk, so that the upper fragment shall not by jammed upon the lower, nor contorted in relation to it by the movements of the trunk. 4th. To obviate the contraction of the muscles by the employment of an extending force, uniform in its action, easily graduated, and not requiring the application of bands to the ankle. 5th. So to arrange the supports, that in compound fractures we may have free access to the seat of injury, without removing any of the essential supports of the limb. 6th. To effect these objects by an apparatus simple in construction, capable of being anywhere procured, easy of application, not requiring to be reädjusted, and of but trifling expense."

Thus much having been said concerning the uses of the apparatus, its construction and mode of application may next be considered, in so far as they may tend to verify the truth of the assertions. A single splint constructed of iron wire for a framework, upon which muslin is stretched, forms the whole of the rigid, or supporting part, of the contrivance. The surface of the splint is flat, and has the shape of a long parallelogram, being bent in three different portions of its course, at angles to correspond with the upper flexures of the ankle, knee, and hip joints, these angles being modified according to the special indications growing out of the position of the fracture; the main idea being to accommodate the position of the distal fragment with the proximal one. The required position having been obtained, the splint is applied on the upper suface of the limb, and secured by the wet bandages, encircling it severally as follows: one above the ankle, one above and one below the knee, and one on the upper portion of the thigh. The suspending apparatus is next to be applied. As the degree of obliquity of the suspending cord in relation to the position of limb is said to have a great deal to do with the degree and direction of the extension employed, Professor Smith is very particular upon the point. Before proceeding further, we give the description of this portion of the splint in his own words:—"A small iron pulley is to be screwed into the ceiling, over the bed of the patient, perpendicularly over the middle of the skin, or nearly so. A cord about as thick as the wire of the splint passes over the pulley, and is reeved through a small tent-block, by which, slipping it upwards or downwards, we elevate or depress the limb. The eccentric pressure prevents the weight of the limb from causing it to slip; if not, rub it with chalk. This single cord, which depends from the block, has a loop at its end about two feet or more above the limb. Through this, another cord about five feet long passes, and hangs double from the loop by its centre. Each end has a hook attached to it, and when everything is ready they are hooked in appropriate loops in the cross-bars which are situated at different portions of the splint. Now, as to the points of attachment of these hooks, the author maintains that it is of great importance, in order that the centre of gravity of the limb be properly adjusted, and gives numerous directions as to how this can best be done. Lastly, the roller bandage is applied; and in order to complete the application of the principle, the extending or counter-extending forces, all that is necessary is "to move the bed of the patient "headways.'"

Having thus given the author's views, let us look at the other side of the question.

The first objection which can be raised against the splint is, that it maintains the limb in a more or less flexed position. It is now pretty well settled by the majority of the authorities upon the subject, that such a position has too many disadvantages attached to it to bear a strong recommendation, and it seems to us that our author hazards a great deal when he so boldly departs from an accepted rule without giving any better reasons than he does for so doing. His arguments would appear sound enough if we were willing to accept his premises. In starting with the assertion that the upper fragment of a fracture of the thigh, for instance, is tilted up by the action of the flexors, he assumes that, in order to get the two ends of the bones in proper position, the distal fragment must be brought up to the proximal one. Now, it strikes us that under ordinary circumstances, the more the thigh is flexed upon the pelvis, the greater the chance will be of tilting the fragment further forward; for, by relaxing the quadriceps extensor, the extremity of the fragment loses much of

that support which it would otherwise have. These muscles of the thigh, acting as so many natural splints, help to counteract, in no small degree, the action of the psoas and iliacus internus muscles. His object is also to give a uniform support to the limb without "lashings." But is this accomplished? Suppose a limb is suspended in the splint as proposed, what is the inevitable result? The weight of it upon the bandages causes a more or less extension of the fabric, and the limb sinks into them. If it did nothing more than this, the support might be equable and agreeable; but it is not likely to stop here. The limb, having lost its continuity at the point of fracture, is not apt to keep itself in line, and its whole weight is apt to be felt upon the weakest point; and as the result, there is a bowing backwards of the fragments. We speak advisedly when we say that this has occurred in numerous instances in which the splint has been tried, and especially has it been noted in cases of compound fractures, in which the opening being posteriorly, even the small support of sound tissue in that locality is lost.

It is true that the limb suspended in the apparatus is more or less obedient to the movements of the body, but this apparent good is more than counterbalanced by the resulting evil; for the splint being attached in common to the limb and the pelvis, we have a right to inquire how the extension is to be effected. We have, it is true, an apology for extension in the degree of the obliquity of the suspending cord; but how does it act upon the fracture? The two extremities of the bone are as firmly held together as bandage and iron wire can keep them, and steadied with firm, if not unyielding, appliances to the trunk. The extension is in reality exerted upon the abdomen of the patient, while the counter-extension is effected by the weight of the rest of the body upon the bed.

Even if the contrivance would admit theoretically or practically of extension, we cannot see what advantage the flexed position could have upon the straight. For by the former we shorten the distance between a muscle given to contraction, and at the same time virtually lift up the distal end of the proximal fragment by depriving it of the support of the natural muscular splints. In the straight position, when extension is properly made, everything is taken advantage of; the extensors are put upon the stretch, and help to pull down the tilting fragment, while that same force continuing and the fragment being proportionably braced, extension is next felt upon the psoas and iliacus internal muscles, and they eventually become wearied out, and give way.

The advantage of free access being afforded to parts, the subject of compound fracture, is something to take into account; but, for reasons already stated, the straight position would be the far preferable one.

The claim of simplicity of the apparatus is not to our mind so well established when we take into account the many necessary little fixings which must be attended to—the procuring of the splint in the first place, its bending, then the care of applying it, and last but not least, the inconvenience of attaching the whole to the ceiling. Whatever may be claimed by our author for the splint on practical grounds, he can hardly urge the one of simplicity as a recommendation for favor.

As a whole, we hardly think that the views of the author will commend themselves for the adoption of practising surgeons. The whole work bears evidence of special pleading in favor of an apparatus which the professor believes is unequalled; and although his convictions are stated in that good faith which should characterize every true worker in some new field of investigation, they lose all their force when the arguments for their support are candidly examined. We doubt not that in Professor Smith's hands the apparatus has done well; but its defects in arrangement and principle of action have doubtless been so modified by his own peculiar surgical skill, that we can hardly expect its employment to be attended with equal good results in less proficient hands.

From considerable experience in the treatment of fractures of the thigh by the straight position, we confess ourselves prejudiced in favor of it, but not so strongly as not to be open to conviction and change; but Professor Smith's work, far from altering our opinion, tends only to confirm it.

Reports of Societies.

N. Y. PATHOLOGICAL SOCIETY.

STATED MEETING, June 12, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

CANCEROUS LIVER AND SPLEEN.

DR. CUTTER presented a specimen of cancerous liver and spleen, accompanied with the following history:

June 2d, was called to see Mrs. D., age 53 years 9 months, who was said to be suffering from a tumor in the abdomen.

I found my patient confined to her bed, very much emaciated, with that peculiar countenance indicative of cancer.

Upon making an examination of the abdomen I found a large tumor in the epigastric region, which pulsated strongly, had a bruit and a thrill which were no longer discovered when the tumor was lifted from the aorta.

She at the same time drew my attention to a "wind tumor," as she termed it, in the right iliac region; it was not very prominent; fluctuation was distinct; and the feel was very peculiar, as if the wall of the cyst were composed of parchment.

I took it at once to be a cyst of the ovary until, she informed me that it had existed since she was ten years of age.

At that time she had had intermittent fever for about ten months; this made its appearance shortly after; it was described as an "ague cake," occupying the abdomen high up on the right side.

Eighteen years ago it suddenly fell into the pelvis; this was attended with great pain for about 48 hours. Should she arise suddenly or move about without stays or support she would suffer greatly with colic. Otherwise it has given her no inconvenience since.

The first symptoms of her disease began about six months ago.

The first complaint was a sense of uneasiness at the pit of the stomach, which came on without fever or other illness, and was always aggravated by taking food. This uneasiness was attended with impairment of appetite and with flatulence, heartburn, etc.

Vomiting was more or less prominent from the beginning to the end of the disease. The four days previous to her death she took no nourishment by the stomach, but having an *incessant* thirst, she drank cold ice-water in large quantities, and vomited *immediately* after each draught.

She had not a particle of pain from the first appearance of the disease to its termination, and died worn out by want of nourishment and broken rest, about six months after the disease first appeared.

The tumor presenting such a peculiar appearance, and the doctor not having had an opportunity to examine thoroughly into its condition, a committee was appoint-

ed, composed of himself and Dr. Rogers, to report upon the same at the next meeting.

SPONTANEOUS AND DIFFUSE OSTEO-MYELITIS.

Dr. Louis Bauer gave the history and exhibited the specimen of a case of spontaneous and diffuse osteo-myelitis, caries of the tibio-tarsal and intertarsal articulations, and multilocular abscess.

The patient belongs to a very healthy family. Since her infancy she has herself been of delicate constitution with a strongly marked nervous temperament, though never before so sick as to require medical attendance. In August last she was attacked with rigor and subsequent fever. The attending physician regarded the same as intermittent, and prescribed the ordinary remedies, to which it readily yielded. A few days after, he noticed a circumscribed swelling at the middle and in front of the left leg and another at the inner side of the corresponding ankle-joint, which rapidly matured into an abscess. The pain attending their formation was but insignificant, and the general health was scarcely disturbed. No cause could be assigned for the existing trouble.

On the 9th of September the patient was transferred to the care of Dr. Bauer. On examination the patient appeared very much excited and adverse to being disturbed. Her pulse ran as high as 116 per minute; there was, however, no increase of temperature or derangement of the vital functions. Appetite, alvine and urinary discharges were in the best order.

At the inner surface of the tibia there was a small aperture, surrounded by moderate thickening of the alveolar tissue. Its discharge was of a sero-purulent character and moderate in quantity. There was a similar opening at the ankle-joint with more circumferential intumescence, etc. Both leg and foot were œdematous.

Except the accelerated pulse, none of the appearances denoted an aggravated condition of the patient, and that might be satisfactorily explained by the excitement and the prevailing anæmia. However, it was deemed proper to examine the fistulous openings under anæsthesia, to ascertain the condition of the osseous structure in order to form a clear diagnosis. At the upper one the tibia was found to be bare and rough to an inconsiderable extent. The lower aperture led directly into the joint and the probe touched bare bone. The serious character of the complaint was thus fully established. So obscure as to the cause, so difficult was it to ascertain the relation of the co-existing affections. To all appearance, the two abscesses had formed contemporaneously; but there were no indications of an anatomical connection.

Liberal diet and proper hygiene were insisted on, quinine with iron prescribed, and the affected limb fermented and bathed with an infusion of chamomile.

Thus had the case proceeded a fortnight, when diarrhœa rendered the discontinuance of the iron and the use of opium necessary. Shortly after, medication had altogether to be suspended on account of gastric derangement. Scarcely had this been done, when a cold abscess at the left hip formed. Being evacuated by puncture, its contents proved to be pus, which measured about from six to eight ounces. Quinine was of course resumed. It is worthy of note that the suspension of that remedy on two more occasions was again followed by abscesses, respectively at the right infra-clavicular space and the right hip. On none of these occasions was there any constitutional aggravation; nor did the abscesses cause the slightest inconvenience to the patient during their ephemeral existence.

The latter part of the existing trouble offered very little material for clinical observation. The fistulous openings became of course more numerous along the lower half of the tibia and around the ankle-joint; the integuments of the leg, and particularly about the tarsus, were greatly swollen, infiltrated, and hardened. Though a flat shell of newly-formed bone was eliminated from the upper part of the tibia, which was followed by cicatrization of corresponding fistulous apertures, yet the disease made more rapid strides towards the disintegration of the tarsal bones, involving their respective joints, and amputation suggested itself as the only remedy of the malady. It was performed on the 25th May ultimo.

The specimen now exhibited fully sustains the wisdom of the proceeding. Moreover it discloses a state of disintegration totally out of keeping with the clinical character placed on record. It consists of the lower part of the femur, the entire tibia and fibula, the tarsus, and a fragment of the metatarsus. The doctor had indeed hoped and attempted the saving of the knee-joint, but finding the tibia softened and not free from disease high up, he had to include the articulation in the operation.

Although the focus of the disease was obviously limited to the lower two-thirds of the tibia, having extended downwards to the foot, nevertheless the remaining portion of the shin-bone was rough on the surface and soft in consistence; the articular cartilages were white and opaque, implying some fatty degeneration of their respective cells, there was a slight increase of synovia, and the femur exhibited in the fresh state a degree of vascularity and hyperæmia not at all foreseen.

For the better appreciation of the specimen, the bones of the leg had been divided transversely, and the lower half of the tibia and the tarsus longitudinally.

It should be mentioned, that the periosteum was by no means notably thick, but that the soft parts of the amputated extremity were very succulent from œdematous infiltration, and the muscles pale and fatty.

In viewing the tibia on its surface, there was no attempt at demarcation. The lower two-thirds consisted of new bone which overlapped above the old bone, like a shingle. At the middle the new bone was osteoporotic, obviously from caries; thereabout was an ovoid cloaca leading to the medullary cavity.

At the transverse section, the new bone surrounded the old tibia two-thirds; of the latter there is but the posterior wall covered with semifluid and homogeneous pus.

On the longitudinal section of the tibia, there were but a few isolated remnants of the old structure (sequestra); the substance was made up of osteoplastic formations. The chamber was filled with pus; no vestige was left of the medullary structure. From the chamber a few cloacæ perforate the involucrum, one of which penetrates the tibio-tarsal articulation, and has thus given rise to the affection of that and of the tarsal joints and bones. The two lower extremities of tibia and fibula were connected by copiously formed new bone-substance.

In conclusion, Dr. Bauer made the following remarks: From the character of the specimen osteo-myelitis must be inferred. The periosteum is in the main healthy, and it was thus capable of supplying the vast material that encased gradually the remnants of the vanquished portion of the tibia. Where it has suffered disintegration, it is the effect of the internal trouble of the bone.

In accepting the clinical views of Herman Demme as authority, and he is unquestionably the best informed monographist on the subject,* the symptoms in the case

* Archive of Clinical Surgery, by B. Langenbeck, Billroth, and Gurlt, vol. iii. Berlin, 1862.

did by no means justify that diagnosis. The disease was, as it were, sprung upon the patient. Neither its beginning nor its course was characterized by that *deep-seated pain and swelling* upon which that author lays so much stress. There was no epiphysal separation, nor were those ichoræmic constitutional symptoms observed to which he attaches so much diagnostic importance. The very mode in which the local abscess formed in this case gave the contradiction to Demme. The extraordinary clinical character of the case under consideration must therefore be admitted. The specimen fortunately furnishes the key to the clinical divergence of the case. There is that early perforation of the medullary cavity into the ankle-joint which allowed in a measure the escape of the matter formed inside of the bone, and this certainly accounts for the absence of pain and deep-seated swelling at the circumference of the tibia. Whatever the causes of the multilocular abscess may have been, they certainly could not have resulted from septæmia, because there was no constitutional evidence of that description.

In summing up the results of our investigation, we are led to the conclusion that the early perforation of the medullary cavity relieves the most aggravated symptoms of osteo-myelitis, and changes materially its clinical manifestations.

AMPUTATION AT THE KNEE-JOINT.

DR. POST expressed great doubt as to whether mere softening of the lower portion of the femur was an obstacle to amputation, as he had often found the bone in that condition, the result of inflammation; and without hesitation cut through it with the saw, and had never any bad results.

DR. BAUER was against amputation at the knee-joint, and always preferred to make his section above.

DR. POST remarked that the first case of amputation at the knee-joint that he had met with, was performed by an army surgeon upon a soldier who had been wounded in the Seminole War. After the operation, the patient was admitted into the N. Y. Hospital, and came under his charge. He was struck not only with the excellent stump which resulted, but was also well pleased with the breadth of surface which was left at the extremity. The patient in a short time was able to walk about without difficulty, and at one time performed a journey upon it of twenty miles with a common peg-leg. It was in fact a better stump than he had ever seen after amputation of the thigh. He stated further that Velpeau, in his discussion of the subject, had most conclusively pointed out the advantage of amputation at the knee-joint, and Dr. Markoe, in his paper upon the same operation, had shown its value. In all the cases that had come to Dr. Post's knowledge, the patient was able to bear the weight of the body directly upon the end of the stump, which it was well known was not often the case when the section was made higher up.

DR. BAUER thought that the number of operations that had been performed at the knee-joint, did not, as far as comparative statistics with reference to the femur were concerned, enable any one to arrive at a fair conclusion. The best surgical writers of the day express their views with great caution, and prefer to quote Dr. Markoe and his experience and his conclusions, rather than give their own. In this regard the opinion in favor of knee-joint amputation could hardly be considered as conclusive. In reference to statistics, there could be no better of the knee-joint than he had of the thigh; he had thirty-seven amputations in the middle and lower portions of the thigh, and had lost but one patient. He believed further, that as far as the latter operation was concerned, the statistics were improving every day, and that the old opinion relative to the danger to life the nearer the trunk was approached, was being rapidly overthrown. A certain German professor had shown this by the results in his cases, and explains the fact by asserting that he does not irritate the stumps with straps; that he allows them to swell, gives a chance for the fluid to escape; and it is by this plan of treatment alone, and nothing else, that his successes far exceeded any on record. Dr. Bauer had been so forcibly struck with this assertion, that he had ever since followed that surgeon's maxims. As bearing upon the point at issue, he would remind the members that the removal of the cartilage of incrustation was now being recommended in all amputations through the joint, as it was thought to give a better chance for the healing of the stump.

At this stage of the proceedings, DR. JACOBI moved that as there were a number of specimens awaiting presentation, and as the time was getting limited, that the discussion upon the prolific and perplexing question be for the present deferred.

INTRA-ABDOMINAL TUMORS IN FŒTUS CAUSING COMPLICATED LABOR.

DR. FINNELL next exhibited two interesting intra-abdominal tumors, which were contained in the body of an infant, and gave the following account of the peculiar influence these had upon its birth.

The mother was twenty-one years of age; had been married one year; and supposing herself eight months pregnant, was taken in labor at five o'clock in the evening. Her medical attendant remained with her during the night, and at five in the morning, the labor steadily progressing, the membranes ruptured and the waters were discharged. At eight o'clock the head was delivered, but beyond this point there was no progress. The gentleman in attendance made all reasonable force to extract the child, but could not succeed. He then sent for a friend, and after a great deal more force was expended, the child was in the same position. A third assistant was then summoned, but his efforts were alike unsuccessful, except that he succeeded in bringing down the arms; and when exhausted he raised the head and found it severed from the body. Dr. Finnell was summoned, and supposing the case to be one of hydrothorax, introduced a perforator, but only a small quantity of blood escaped; and in taking up the arms to make traction, they also were found to be separated, and had to be laid aside. The feet were then grasped, and version performed. When, however, the feet were brought down, it was found impossible to get the body out. Supposing, then, that it must be a case of ascites, the abdomen was next perforated, but no water came; and, almost in despair, the efforts at extraction were renewed, and after a good deal of hard work the body of the child was withdrawn. On introducing the hand into the uterus, for the purpose of withdrawing the placenta, another mass, oblong in shape, and somewhat larger than the closed fist, was found floating freely about.

On cutting open the body of the child, a tumor, precisely similar to the one found in the uterus, was discovered lying, with but slight attachments, in the abdominal cavity. It seemingly took its origin from the peritoneum. In the opposite side of the abdomen was a space left which corresponded in size to the tumor in the uterus. It was then evident that it had originally occupied that situation, and had, in the efforts at extraction, been squeezed outside of the child's body through the opening made by the perforator; and that, in common with its fellow found *in situ*, was the singular

cause of the difficult labor. The child was perfectly well formed every other way, and the mother was doing well.

Dr. Rogers asked if any testicles were discovered in the scrotum of the child.

Dr. Finnell was under the impression that he felt for the testicles and found them descended.

Dr. Jacobi thought they might either be supra-renal capsules or enlarged peritoneal glands.

Dr. Krackowizer thought that inasmuch as the tumors were so symmetrical, and both occupied the same position in the abdominal cavity of the child, they were the results of an enlargement of twin organs, and that it would hardly be probable that the two peritoneal glands should so evenly develop themselves.

Dr. Rogers stated that he had had the opportunity of examining the organs, and found them to be fibro-cystic tumors of the purest character; and as many of the cysts were lined with tesselated epithelium, it would seem as if the masses were nothing more than abnormally developed testes. It was on account of such an opinion that he had asked thus particularly concerning the presence of those organs in the scrotum. In answer to a question from Dr. Sands, he stated that the stroma was composed almost entirely of fibre and cell-structure.

On motion of Dr. Bibbins, a committee of three, consisting of Drs. Finnell, Krackowizer, and Rogers, were appointed to examine the growths microscopically, and report the result at the next meeting.

MITRAL DIRECT AND REGURGITANT MURMUR, AND PROBABLY TRICUSPID DIRECT MURMUR.

Dr Flint next presented a heart, for which he was indebted to Dr. George K. Smith, of Brooklyn; the patient from whom it was removed being under the observation of that gentleman for over a year. Dr. Flint was not prepared to give the details of the history, but presented the specimen merely with reference to an anatomical point, and also in reference to a point connected with physical exploration. He would say that the patient had the signs of organic disease of the heart, and finally death occurred from some intercurrent affection. The interest of the specimen centred in the existence of obstructive valvular disease at both the tricuspid and mitral orifices. There was a very considerable degree of obstruction at the latter orifice, in consequence of which it was so reduced in size as scarcely to admit the end of the finger; the curtains of the valve being thickened, but nevertheless capable of vibration. On the opposite side the nature of the lesion was much the same, and both were evidently of long standing. There were also aortic lesions.

"The first time," said Dr. F., "that the patient came under my observation was accidentally about a year ago. Then there was a loud mitral direct murmur without a mitral regurgitant. Inasmuch as the existence of this murmur is denied by some, this case would afford a very good illustration of its existence. It was so loud and distinct that I used the patient to verify its character to quite a large number of students.

"There is, however, another point which relates to the probable existence of a tricuspid direct murmur. This is a murmur, the existence of which, so far as I know, has not been distinctly made out; I do not think that its existence has been established. There is, however, no reason why we should not have such a murmur under conditions similar to those which furnish the mitral direct, viz. firmness with vibration."

"Dr. Smith, who has given considerable attention to physical signs, feels very well satisfied that both murmurs, the mitral direct and tricuspid direct, were audible; and he bases his opinion upon this fact, that the pre-systolic murmur, instead of being limited to a small area surrounding the apex, which is true of the mitral direct, had a wider area, and extended to the right border of the heart.

ABORTION CAUSED BY UTERINE DISEASE AT THE TIME OF CONCEPTION.

Dr. Jacobi exhibited the products of abortion from a lady twenty-five years of age. She had had two living children, the oldest being four years, the youngest two. Soon after the birth of the last she suffered from uterine catarrh, for which she was under treatment during last fall and winter. Up to the beginning of January she was much improved, but was not considered well. She stayed away from the office from this time because menstruation ceased, and she had become pregnant. In all probability she became so about the middle of January. She felt quite well until six or seven weeks ago, when she began to notice now and then a little bloody discharge. As I thought miscarriage was threatened I ordered her to bed for a time, and repeatedly kept her in a recumbent position on the recurrence of the discharge. Finally observing that her abdomen did not enlarge as it should, I allowed her to remain up permanently, supposing that the fœtus was dead, and that it would be in time discharged. It was voided to-day.

The specimen is interesting, first in regard to the condition of the placenta, which shows the signs of quite extensive inflammation, in the shape of fatty and fibrinous exudation. Secondly, the insertion of the cord is filamentous. This is of comparatively rare occurrence, as it is only once in 250 times in which it takes its origin in the membranes, and not in the placenta itself. The cord is unusually long, so that it surrounds the neck, and spreads over a large surface of the body. Then again it looks as if there is a knot in the cord at one point, and at several places it is surrounded with fibrine. There are moreover fibres attached to the amnion and extending to the body of the child, while upon the foot adhesions have taken place with the toes in such a way as to crowd them down in rather a curious manner. In conclusion Dr. Jacobi expressed the opinion that the inflammation of the decidua and placenta was due to the metritis existing at the time of impregnation.

Dr. Sands exhibited a specimen of extra-uterine fœtation. During the month of August he was sent for to see a lady who was supposed to be suffering from cholera. He was told that she was seized with abdominal pain on the evening previous, which was both sudden and severe, and had extended up to a short time before the visit. When seen she was almost moribund, her lips were blanched, her surface cold, and her voice was reduced almost to a whisper. She had, however, no *vomiting* or *purging*. It was ascertained that she had menstruated six weeks previously, and that for the last day or two she had had a slight discharge from the vagina. The symptoms pointed towards internal hæmorrhage. She only survived a few hours; and on post-mortem examination a fœtus was found developed in the Fallopian tube, midway between the uterus and fimbriated extremity. There were several pints of blood in the peritoneal cavity.

Adjourned.

Special Departments in King's College Hospital.—It is in contemplation to make two special departments in King's College Hospital: one for diseases of the throat, which for the present will be under the charge of Dr. George Johnson, who will give laryngoscopic demonstrations; and the other for diseases of the skin, which Dr. Duffin will superintend.

EAST RIVER MEDICAL ASSOCIATION.

STATED MEETING, JUNE 4, 1867.

DR. VERRANUS MORSE, PRESIDENT, in the Chair.

DR. W. F. THOMS, in behalf of the Delegation to the American Medical Association, presented a brief summary of the questions discussed at their last session.

SCARLATINA AND RUBEOLA—ARE THEY STRICTLY CONTAGIOUS?

A discussion relative to the late classification of scarlatina and rubeola among the contagious diseases, by the Metropolitan Board of Health, resulted in the appointment of a special committee to report at the next meeting. The committee as appointed consisted of the following:—Drs. G. V. Skiff, M. S. Buttles, W. F. Thoms, R. J. O'Sullivan, and Truman Nichols.

A CASE OF AXILLARY TUMOR.

DR. ABBOTT presented an interesting case of tumor in the axilla of a boy, which involved several doubtful points in the diagnosis.

THE UNAUTHORIZED RENEWAL OF PRESCRIPTIONS BY APOTHECARIES.

DR. O'SULLIVAN presented the evils of the above custom in forcible terms, and called for the appointment of a committee to be charged with the drafting of the resolutions, necessary to bring the matter before the parties concerned. Drs. O'Sullivan, Newman, and M. L. Smith, were constituted said committee.

A PESSARY ON A NEW PRINCIPLE.

DR. BUTTLES exhibited a pessary invented by himself, for which he claimed the possession of at least one desirable quality, that of harmlessness;—although of course, he expected to have other requisites of a more positive character. But those who had occasion to witness some of the evils resulting from even properly applied pessaries, such as the horse-shoe, or double S, would appreciate his remark.

Among these evils might be mentioned ulceration at the points of contact between the instrument and the tissues, to say nothing of the fact, that occasionally the *ascending rami* of the pubes had even been deprived of periosteum as a result of prolonged use.

He recognized the principle that the vagina was the chief support of the uterus, and that while the broad end or base of this gutta-percha pessary, now exhibited, held up the uterus, the smaller one floated in the vagina. It also possessed another advantage, that of being readily moulded to any shape by dipping in oil and passing through the flame of a spirit lamp.*

CONTINUED VOMITING AFTER THE APPARENT COMPLETE REDUCTION OF A STRANGULATED HERNIA.

DR. STEIN gave the details of a case, which had occurred in his own practice, where the vomiting continued after the hernia had been to all intents and purposes reduced. This he explained on the hypothesis that a small portion of the intestine had been inclosed between the muscular fibres of the over-lying muscle, and there was in fact virtual strangulation, although to a very limited extent. The patient, however, recovered.

DR. NICHOLS had remarked the same phenomenon once or twice n his own practice.

DR. M. L. SMITH related a case in which the protrusion had been returned "*en masse*," and an autopsy revealed the presence of membranous girdle which encircled and tightly grasped a knuckle of intestine. He regarded Dr. Stein's explanation as not only probable but correct.

The meeting then adjourned.

* A woodcut, and fuller description of this pessary, will probably appear in a subsequent number of the MEDICAL RECORD.—*Ed.*

STATED MEETING, JULY 2, 1867.

DR. VERRANUS MORSE, PRESIDENT, in the Chair.

REPORT OF THE COMMITTEE ON THE PROPHYLAXIS OF SCARLATINA AND RUBEOLA.

DR. SKIFF read the following report, which was signed by all the members of the committee, and which was subsequently adopted as the sense of the meeting:

Keeping within the province of the subject sketched out, it will answer the purpose of the committee to consider such characteristics as are common to both measles and scarlatina. In compliance with this plan, and adopting the hypothesis most generally entertained respecting the matter of contagion, and the miasm of infection, we observe:

1. Measles and scarlatina are incident to childhood, but may occur at any age.

2. That having occurred once, they constitute an immunity against an attack of the same disease.

3. That they are each caused by a miasm extraneous to the human body, and portable by means of fomites.

4. That they are not inoculable. or preventable to any extent by substituting a less fatal or a less infectious disease.

5. That they are not peculiar to any social condition of society;—the malign or non-malign characters being mostly dependent on a more or less pernicious epidemic, the peculiar condition or idiosyncrasy of the individual attacked, or the complications which may occur in the course of the disease.

6. That they are self-limiting diseases.

7. That the fatality seems to depend more on the virulence of the particular epidemic than the amount of miasmatic infection entering the system.

The committee concluded that:

1. Measles and scarlatina, though originating from causes extraneous to the body, are so commonly prevalent that they are naturally diseases of childhood,—but are nevertheless incident to any period of life. As then there is no certain exemption from these diseases, it would seem desirable for prudential reasons that they should be contracted in infancy, while the child is surrounded by parents and friends who can supply the adequate nursing and attention.

2. It is evident that if every case of measles and scarlatina could be completely isolated from the non-infected, and all healthy persons for ever unexposed to the poisonous infection, the diseases in question would become extinct. But although this is impossible, the other extreme of allowing a virulent epidemic to prevail without the opposition of the humanitarian or physician would be unreasonable, nay more, unnatural. The happy mean challenges our attention as at once practical, philosophical, and charitable.

So then since a mild form of either measles or scarlatina is a conservator as effectual as the most malignant against a second invasion in the individual, the indications are to avoid the more malignant if practicable.

3. Practically the idea may be elaborated thus:—

a. Isolation should be enforced in the case of patients suffering from any disease but ill calculated to bear any additional burden. To these may be added a sub-class of pregnant women.

b. In a serious epidemic, the infected should be isolated from those who have not yet been attacked; to this plan may be added, thorough ventilation, cleanliness, and the use of disinfectants.

In the investigation of the subject under consideration the Committee called upon Dr. Elisha Harris, Secretary of the Board of Health, and received in reply to their questions the following letter:—

OFFICE OF THE METROPOLITAN BOARD OF HEALTH,
No. 301 Mott Street, N. Y., June 5, 1867.

In reply to the questions—

1. What sanitary measures are now adopted and suggested by the Board of Health to prevent and to mitigate scarlatina, small-pox, and measles?

2. What is recommended to the physicians who have patients with these diseases? the following statements are submitted as embodying, in an unofficial form, all the facts on the subject so far as the officers of the Board have given advice or orders relating to these diseases:—

a. The persons sick with any of these diseases among the poor or ignorant classes should be kept isolated entirely from all except the members of their own families or nurses.

Generally it is expected that a person sick with small-pox or varioloid must be sent to the Small-pox Hospital on Blackwell's Island; and upon most such cases the Sanitary Superintendent issues his official order for the transfer of the sick person.

b. The sick rooms and all that pertains to them must be kept *constantly ventilated*, and the fire-place be kept open,—occasionally or constantly having a little fire in it, if there is such a fire-place.

c. Fresh chloride of lime or flasks of fluid carbolic acid are advised to be kept in the room, placed in secure position.

d. Every article of personal clothing and bedding that has been in contact with the sick person should be placed in boiling water or in a solution of some positive disinfectant—such as solut. permang. potassa (4 3 to 2 or 3 galls.) or one of the chlorine solutions. The same dilute solutions of the disinfectants should be sprinkled about the rooms where the sick lie, or, what is better, they may be evaporated from wet cloths suspended. This practice is recommended where there is an epidemic in a crowded population.

e. The cleansing of the houses and premises where any such infectious disease has prevailed is also important. Whitewashing with fresh-slaked lime or with chloride of lime; scrubbing floors and all woodwork and hard walls with hot solutions of chloride of lime; and the keeping of windows and doors open for several days, are the chief measures.

This practice is now applied to diphtheria, typhus, typhoid, "spotted fever," and cholera; but the few cases of spotted fever hitherto seen are not supposed to have been infectious; they were surrounded by localizing sources of disease.

(Signed) E. HARRIS,
Cor. Secretary of Metropolitan Board of Health.

In conclusion, the Committee would make the following practical suggestions:

1st. That during an ordinary epidemic of measles or scarlatina, no sanitary measures, except ventilation and cleanliness, should be employed.

2d. That during a severe epidemic of these diseases the following sanitary measures should be adopted.

A. *Isolation.* The patient should be placed in a room apart from the rest of the family and attended by a person who has had the disease—no communication being allowed with the rest of the family.

B. *Ventilation* and *Cleanliness.* The windows of the room should be kept constantly open, and whenever practicable a fire in a fire-place, with a view to add to these means, should be constantly maintained.

The most thorough cleanliness should be insisted upon —and bed-linen ought to be changed as often as practicable.

C. *Disinfection.* Every article of personal clothing and bedding once in contact with the patient should be steeped in boiling water or in a solution of the permanganate of potassa (1 oz. of the permanganate to three gallons of water).

The chamber vessels should be disinfected by a solution of sulphate of iron and carbolic acid.

D. *Fumigation.* After patients have recovered, the room in which they were sick should be vacated for at least twelve hours,—every window and aperture closed, and upon an iron pipkin or kettle with legs burn a few ounces of sulphur.

Let the room be kept closed for eight hours and then ventilate thoroughly.

PRESCRIPTIONS THE PROPERTY OF THE PRESCRIBING PHYSICIAN.

DR. O'SULLIVAN, as chairman of the committee upon the Grievances of Practitioners and their right to prevent the unauthorized repetition of their prescriptions, reported that as far as interviews with apothecaries had been obtained the latter fully agree with the committee that the proposed action of the Association is necessary and of great importance. Many of these pharmaceutists indeed expressed themselves surprised that the profession did not move in this matter at an earlier date, thereby relieving them of great responsibility, and placing the control of this matter more directly in the hands of the profession. A few did not refuse to accede, but from their answers it was evident they would be governed by the action to be taken by the physicians in the matter. The committee hoped that the resolutions about to be presented were sufficient and explicit enough to meet these objections They further had the pleasure to report, that the members of the profession addressed on the subject approved the movement and thought that it would become general, not only in this, but in other cities of this State and country. They say, further, that it is understood the Academy of Medicine and other societies of this city will move in this matter immediately.

The resolutions were then adopted and are as follows:

Whereas, The attention of this Society has been called to consider the propriety of taking action relative to the practice of druggists renewing the prescriptions of physicians without their written order, thereby injuring very materially the pecuniary interests of the profession, without gaining any particular benefit to themselves; and

Whereas, In view of the graver and more important consideration that the interests and lives of patients are, in consequence, endangered, we consider it a duty to guard to the utmost of our ability against the liability to mistakes which should be prevented rather than deplored; be it therefore

Resolved, That we cordially invite the earnest coöperation of every druggist in this city, especially in our immediate districts, to further this laudable purpose; and be it further

Resolved, That we respectfully request that no druggist will renew the prescriptions of any physician connected with this Society, without due authority for each and every such renewal. Further, we will regard as unworthy of our patronage any druggist who fails to comply with the requirements of these resolutions.

Resolved, That a copy of these resolutions, with a blank card, be sent to each and every druggist in our districts, with a request that the card be returned within two weeks to the Secretary, signifying their intentions, with

reference to compliance, or non-compliance, with these resolutions.

The Association then adjourned.

Correspondence.

THE UTERINE ELEMENT IN PRACTICE.

To the Editor of the Medical Record.

Sir—I cannot withhold my approbation of your article on this subject in your number for July 1. Such plain talk is eminently necessary at the present time, for the uterus has come to be the arena for the most crying abuse that exists in our profession. There is both more ultraism and more quackery exhibited by respectable medical men in connexion with this organ than any other part of the system. The speculum has become as common in some quarters as the stethoscope, and many women talk as freely about diseases of the womb as they do about those of the stomach or lungs. Thirty years ago Dr. Balbirnie, a Scotch physician, held this language of the speculum: "We go forth its advocate; we proclaim ourselves *the apostles of the speculum.* With that instrument we link our fate, and by that we will stand or fall." How the apostles of this instrument have multiplied since then! They are in every city, and in multitudes of towns, and even villages. This apostleship is the best stock in trade of many a rising doctor.

Far be it from me to decry the speculum and other kindred uterine instruments; but I honestly believe that on the whole they are used ten times as often as they ought to be. Indeed, some who intend to use the speculum within proper limitations are obliged to employ it more than they wish to, because the influence of other physicians is so strong for it. This is true of myself. It occurs in this way: A patient presents herself who has formerly been under the care of one of those aforesaid apostles. She is terribly familiar with the speculum, and with all the technical as well as common language about the uterus, for these apostles are wonderfully instructive to their patients. She imagines that she has an ulcer on the mouth of the uterus; and though I not only see no evidence of this, but positive evidence to the contrary, I am forced to use the speculum in order to satisfy her that I am correct in my diagnosis. Sometimes the influence is less direct, but none the less powerful, at least in some of the cases. What the patient has heard from her friends Mrs. A and Mrs. B, who have been under the touch of those apostles, may have so convinced her that she has disease of the womb, and that it must be *looked into*, that the speculum must be introduced, or the patient will pass into other hands.

There are fashions in disease as well as in modes of practice. Certain diseases prevail at certain periods, not because they are really more abundant then than at other times, but because there are abounding thoughts about them, both in the medical and in the public mind. When Corvisart published his book on diseases of the heart, those diseases were at once very prevalent. At one time dyspepsia was the most common word on the tongues of invalids; at another, throat diseases were in the fashion, and tonsils were clipped and throats swabbed; at another, spinal complaints were all the rage; but now female diseases are in the ascendency. Womb on the brain is a very common disorder, and a hard one to treat. I have seen many patients who could have been cured much quicker than they were, if all knowledge of the existence of such an organ as the uterus could have been blotted out of their minds.

The medical profession is ever running into extremes, and these extremes always furnish material for the success of routinists, and those who are ever ready to take advantage of the credulity of the public. There are some who are always found on the topmost wave of public opinion and feeling. They identify themselves as much as they can with whatever most attracts the attention of the many. They of course have seen many cases of every disease that occasions conversation and inquiry, and are ready to communicate what they assume to know on the subject.

Such men are apt at the present time to make much of female diseases. It is the easiest thing in the world to foist up a reputation for skill in them. A hint dropped here and there, some occasional wise saws about the modern advances in the appliances of our art, and the importance of thorough investigation, and the use of the speculum in all cases where there can be any plausible reason given for its use—such means can create a reputation even in spite of consummate ignorance, especially if there be coupled with it a goodly share of cunning, as there often is.

There is great temptation to aspire after such a reputation, in the fact that the favor of the women is one of the best means of obtaining a general practice. Hence it is that so many, even of young practitioners, adopt female diseases as their specialty, to be plied as the chief means of gaining both general notoriety and an introduction into families. I have known this expedient to succeed, even in the case of young men at the very outset of their practice.

A word or two as to the frequency with which diseases of the uterus occur. One would think from the representations of some physicians, that the womb of almost every woman is more or less out of place. Some of us that have been in practice a good while have certainly had a small experience in this respect compared with that which some rather recently-fledged ones claim to have had. If we are wrong, if many of our patients have really had flexions and displacements of the uterus, and we have not known it, the inference is a pretty clear one that such difficulties can exist without doing much harm. This we do not believe, and so we infer that the alleged difficulties do not exist anything like as often as some suppose. A case now and then occurs which throws some light on this point. I give a single one:—A lady had been under my care for a difficulty which was manifestly essentially nervous, and was gradually recovering, though not with uniform progress; for such cases, above all others, are liable to occasional relapses. In one of these relapses she passed into the care of one who was famous for having many cases of uterine misplacements. He pronounced her difficulty to be mainly anteversion of the uterus, which I knew was not so. I speak positively on this point, because I had shortly before made an examination which would have revealed this misplacement if it had existed. The result showed that I was right. If there was such a displacement, a rapid recovery, as was promised, should surely have followed the adjustment of the organ. But instead of this there was the same gradual but irregular recovery that had been going on while she was under my care. The question here arises whether there is not some hazard in making such promises of rapid recovery in such cases. Not much; for the patient may be somewhat benefited by the cordial influence of the new hope, imagination helping on the change; and if the recovery be as slow as before, this may be plausibly attributed to the length of time that she had suffered from the misplacement. Or it may be pretended that there are occasional partial returns of the

dislocation requiring a new adjustment, and that this of course retards the recovery.

There are some other points, as ulceration of the os uteri, that I intended to touch, but this article is already sufficiently long, and I leave those for your next number. *

ANTERIOR LUXATION OF THE CARPAL EXTREMITY OF THE ULNA.

To the Editor of the Medical Record.

Dear Sir—I communicate the following history of a very rare accident, in order that you may place it where it may be of service to the profession.

Kate ——, an Irish domestic, of about twenty years of age, and rather slender form, presented herself at the Demilt Dispensary on the 19th of June, 1867, and gave the following account of her accident. On or about the 1st of the month, while wringing clothes, she suddenly felt her wrist give way, experienced considerable pain in it, and noticed that she could not move it, nor rotate the forearm. Regarding it as a wrench of the joint, various domestic prescriptions were employed, during a period of some days, with unsatisfactory results. By the advice of friends she then applied to the "Institution for the Ruptured and Crippled." The character of her injury was there recognised, and diagnosed as "Spontaneous dislocation of the lower extremity of the ulna."

Rest upon a splint prescribed. Not satisfied with her progress towards recovery, the patient, after waiting many days, finally came to the Dispensary, as above stated, still carrying her wrist upon the splint. The limb presented the following deformity. Forearm fixed in a supine position; the wrist almost immovably fixed in the position of moderate extension; and the fingers moderately flexed and much stiffened. The styloid eminence of the ulna was altogether absent, the wrist on its posterior aspect sloping downwards and inwards towards the ulnar border of the limb. On the palmar aspect of the wrist the head of the ulna was distinctly recognisable, filling up the natural depression immediately behind the pisiform bone, and even rising above its level. The exact position of the bones of the forearm in this deformity I believe to be, *the resting of the internal palmar border of the sigmoid cavity of the radius, in the depression on the dorsal surface of the ulna*, between the styloid process, and its head, the depression forming the groove for the tendon of the extensor carpi ulnaris muscle. This, as a reference to the skeleton will show, produces a palmar displacement of the carpal end of the ulna of half to three-fourths of an inch. It results in the rupture of the anterior radio-ulnar ligament, inevitably, and perhaps of the corresponding posterior ligament. The inter-articular fibro-cartilage is, in all probability, also torn at its attachments or in its continuity. This position also results in putting upon the stretch the tendon of the extensor carpi ulnaris; portions of anterior carpal ligament, and the internal lateral ligament, as well as the interosseous ligament. I believe the obstacle to reduction is mostly to be found in this last ligament. I do not regard the pronator quadratus as involved in this accident, it being no doubt in a state of relaxation. With this view of the anatomy of the luxation, its reduction was easily accomplished by first steadily extending the hand and then flexing it laterally towards the radial border, thus creating a fulcrum of the radio-carpal surface by which to employ the chain of carpal bones as a lever to raise the ulna from the radius through the internal lateral ligament, the medium of attachment of the weight or resistance: and secondly, by a grasping antero-posterior pressure, effected by placing the fingers upon the palmar aspect of the lower end of the ulna, and the thumb of the same hand upon the dorsal surface of the corresponding portion of the radius. This combined force of extension and pressure promptly restored the bones to their normal position, but without snapping, sudden slipping, or other usual phenomena of the return of dislocated bones to articular cavities. It is also more than probable that this process of extension had the additional value of extricating the styloid prominence of the ulna from the carpal bones and ligaments, for they are undoubtedly more or less approximated by the tension of the ligaments and tendons already enumerated. Mobility of the forearm and wrist was at once restored, and the joint presented the same conformation as the opposite one. No experiments were practised with the view of testing the tendency to a reproduction of the dislocation. The forearm and hand were laid in the prone position upon a board, a cushioned roller placed under the wrist between it and the board for the purpose of maintaining a semiflexed position of that joint, and the whole secured by a bandage. Four days later this dressing was removed, and free but gentle movements of the wrist and forearm recommended and practised. There was at this time no manifest tendency to redislocation. Some six days later the movements of the wrist were perfectly free and painless, but there was considerable tenderness over the radio ulnar joint, some swelling, and the movements of pronation and supination were executed slowly and with much discomfort.

Prognosis, slow recovery of this movement.

No manifest tendency to redislocate.

I do not presume that this history, or the remarks in connexion with it, will present anything peculiar or instructive to all of your readers, but as a rare accident, it appears to me to merit a record.

The prolonged presence of the bones out of their normal position in this case—a week or ten days longer than there was any excuse for their remaining—had doubtless much to do in the production of the subsequent protracted tenderness of the radio-ulnar articulation and of the unfavorable prognosis.

Truly yours,

Stephen Rogers.

232 West 34th Street.

A NEW SYRINGE FOR THE EAR.

To the Editor of the Medical Record.

Dear Sir—In your issue of June 15, "How to syringe the ear" reminded me of an ingenious apparatus for this purpose, contrived by Surgeon W. S. W. Ruschenberger, U. S. N., and exhibited to me in 1862 at the Navy Yard, Boston.

Never having seen such an arrangement elsewhere, and presuming the doctor's well known modesty prevented him from giving publicity to so simple a thing, I pick it up as a crumb which seems to me to be worth saving.

It consisted of a tin quart cup divided into two equal compartments by a septum of tin, from top to bottom. In the compartment next the handle of the cup was fixed perpendicularly a proper syringe with a pipe leading up and across the top of the cup. The end of the pipe, near the nozzle, was made flexible for a short distance, for convenience of direction. When an ear was to be washed out, the doctor filled the syringe compartment with pure water, or other injection, placed the edge of the front compartment against the neck, and proceeded to inject. The regurgitating fluid, together with the morbid secretions of the ear, flowed into the

front compartment without communicating with the syringe, thus giving him the advantage of repeated clean injections.

Wm. J. Burge, M. D.

Atchison, Kansas.

New Publications.

The Physiology and Pathology of the Mind. By Henry Maudsley, M.D., London, Physician to the West London Hospital, Honorary Member of the Medico-Psychologica' Society of Paris, etc. New York: Appleton & Co. 1867

The Medical Use of Electricity, with Special Reference to General Electrization as a Tonic in Neuralgia, Rheumatism, etc. By Geo. M. Beard, M.D., & A. D. Rockwell, M.D. New York: W. Wood & Co.

Notes on the Nature, Prevention, and Treatment of Asiatic Cholera. By John C. Peters, M.D. Second edition, with an Appendix. D. Van Nostrand, 192 Broadway. 1867.

A Practical Guide to the Study of Diseases of the Eye. Their Medical and Surgical Treatment. By H. W. Williams, M.D. Cantab., Ophthalmic Surgeon to the City Hospital, etc., Boston, etc., etc. Second Edition. Revised and enlarged. Boston: Ticknor & Fields. 1867.

Medical Items and News.

Death of Civiale.—Civiale has just terminated his long and useful career. The merit of this specialist is universally conceded. His discovery of lithotrity, and his excellent treatise on diseases of the urinary organs, are titles to scientific distinction. He has always been, however, a popular subject of raillery with some of the Paris doctors; and those who accorded to him an incontestable excellence as a patient and skilful manipulator of the bougie, failed to express a respectful regard for his intellectual capacity. We shall not attempt to discuss the causes of this feeling; either that Civiale attempted to encroach too much with his specialty on the domain of general surgery, or that he was not properly appreciated. A correspondent of the *Gazette Medicale*, who judges him with severity, refuses to acknowledge that he had either grace, eloquence, or wit; the same gentleman, however, informs us that he possessed a high order of financial ability in the practice of his specialty, by which he accumulated five millions of francs. Those who do not esteem Civiale for this species of talent, let them throw the mantle of professional charity over his mental infirmities, and recollect only the good that he has accomplished in his special department.

Death of Trousseau and Follin.—The Faculty of Paris has again to mourn a serious loss in the death of two of its distinguished members: Follin, the accomplished surgeon, and the principal editor of the "Arch. Gén. de Médecine," has been cut down in middle life:—Trousseau, the eminent physician, learned professor, the fluent and eloquent orator, has recently died from cancer of the stomach. Follin belonged to the trio designated at one time with a slight irony the "jeune école;" Broca and Verneuil remain. Eminently practical, possessed of an excellent judgment, a vast erudition, and indefatigable in his zeal and efforts to advance the progress of medical science, Follin always evinced a just appreciation of the labors of his own countrymen, and regarded with justice and fitting discrimination the valuable accessions to surgery in other countries. He was the first to introduce the ophthalmoscope into France, to improve it, and to extend its use. He was one of the first to encourage the American operative method for vesico-vaginal fistula. At the request of M. Robert, Dr. Bozeman, of this country, operated successfully for vesico-vaginal fistula at the Hôtel Dieu of Paris, using his button suture; a few months later Follin practised this method successfully, and in two or three published articles discussed its value. The subject of resections, the much-controverted question of syphilis, and many other topics, received a large share of his attention. The soundness of his judgment and the vastness of his accurate knowledge, made the "Arch. Gén. de Médecine" an arbiter of the eventful questions which at different times engaged the attention of the medical public in France. He was the embodiment of successful merit, and an example of energy and application. The vigor and freshness of his intellect elicited from M. Verneuil the beautifully-expressed sentiment which compared him to a tree bearing on the same branches the flowers of youth and the fruit of mature age.

Trousseau was born in 1801, and died on the 23d of last June, at the age of 66. As the pupil of Bretonneau he commenced his medical career, which was long, active, and useful, and the medical profession sincerely laments in its loss of him one of its most valuable members. He was extremely interesting as a professor of materia medica, and impressive as a clinical lecturer. His impressive, chaste, and elegant diction, charmed and fixed the attention of his auditors, equally with the clearness of his thoughts. His manner was cordial and sympathetic. His popularity and his eloquence caused him at one time to enter the arena of political life, and he was elected to a place in the deliberative council of his nation by a majority of 25,000 votes from the "Département de l'Eure-et-Loire."

He published many memoirs and articles in the medical periodicals of the day, especially the "Archives," "Jour. des Con. Medico-Chirurg.," and the "Union Médicale"; and his work on Materia Medica is justly esteemed in France as an excellent treatise. He has also written a large and valuable work on clinical medicine. Some of the French daily journals relate a few interesting incidents to show the serenity and stoicism with which he regarded the approach of death. He pointed out to his most intimate medical friends and favorite pupils the different symptoms and physical signs of his disease, commenting upon the progressive development of the gastric tumor from day to day preceding his death, with the same precision and impressiveness that characterized his clinical lectures in the wards of his hospital.

Previous to his death he addressed a short and affectionate letter to the President of the Academy of Medicine of which he was a prominent member, requesting that no discourse should be pronounced at his funeral.

American Pharmaceutical Association.—The Fifteenth Annual Meeting of the American Pharmaceutical Association will be held in this city, commencing at 3 o'clock P. M., on the second Tuesday in September (10), 1867.

Heart Diseases in California.—An extraordinary prevalence of diseases of the heart and arteries is reported in California, owing, it is thought by the physicians in that locality, to the habit of using such large quantities of intoxicating liquors.

Treatment of Typhus Fever by Tea.—Dr. T. W. Grimshaw, of Dublin, relates 33 cases of typhus fever, of which number 21 were successfully treated by tea, without any other internal remedy of importance; and some of them were of a severe character.—*Medical News.*

Original Communications.

ANEURISM OF THE ARCH OF THE AORTA AND INNOMMINATE ARTERY.

OCCLUSION OF THE MOUTHS OF THE RIGHT SUBCLAVIAN AND BOTH COMMON CAROTID ARTERIES; BRAIN DIRECTLY SUPPLIED ONLY THROUGH THE LEFT VERTEBRAL ARTERY.

By J. C. HUTCHISON, M.D.,

OF BROOKLYN, N. Y.

Richard Murphy, an Irish laborer, 48 years old, was found lying in the street, suffering from dyspnœa and partial insensibility, on 12th December, 1866, and was at once conveyed to the Brooklyn City Hospital. On the following day he stated that he was perfectly well until five months ago, when he began to experience "shortness of breath" after exertion, and about the same time he noticed a swelling at the right sterno-clavicular articulation. The tumor gradually increased in size, accompanied by a proportionate increase in the frequency and severity of the paroxysms of dyspnœa, which has incapacitated him for work for the past two months. He has some cough, and complains of dysphagia; but his general health is remarkably good. Pulsation in the tumor is marked, accompanied by the aneurismal bruit; pulsation in the right carotid and axillary arteries very feeble; no pulsation in the radical artery, and he complains of severe pain and numbness in the forearm and hand, along the course of the nerves.

Dr. Daniel Kissam, during whose service the patient was admitted, recognised aneurism of the arteria innominata, and Valsalva's treatment for internal aneurism was adopted, viz. rest in the recumbent posture, diminished diet, occasional abstraction of blood from the arm, and locally from the vicinity of the tumor, together with 15 drops tinct. digitalis three times a day. This treatment was continued for a month without apparent benefit; indeed the paroxysms of dyspnœa had increased so as to threaten a fatal termination at any moment.

At a consultation of the surgeons of the Hospital, held on the 10th January, 1867, it was decided to ligate the arteries on the distal side of the aneurism, as suggested by Brasdor.

Jan. 13th.—Last night he had three severe paroxysms of dyspnœa, during which his surface became livid and cold, eyes fixed, pupils dilated; violent convulsions also occurred, after which he remained for some time unconscious.

On the 16th January, with the concurrence and assistance of my colleagues of the surgical staff, I determined to ligate the right common carotid and subclavian arteries. An incision was made, commencing at the upper border of the sternum in the mesial line, and extending outwards, just above the clavicle, for three inches; another incision of the same length extended along the outer margin of the sterno-mastoid muscle, and joined the first at the top of the sternum. The integuments, the platysma, the cervical fascia, and both origins of the sterno-mastoid, were divided in succession, and turned outwards; the sterno-hyoid and sterno-thyroid were drawn inwards without being divided; the sheath containing the common carotid was now exposed and opened, and a ligature was applied to the vessel about an inch above its origin. I then followed the carotid towards its origin for the purpose of reaching the subclavian at its first part; but failing to find this portion of the vessel, I passed the finger along the margin of the scalenus anticus down to the first rib, exposed the vessel there, and applied a ligature on the outside of the scaleni muscles. The brachial plexus was exposed, and care was taken to prevent the aneurismal needle from engaging any of its branches. There was no distinct pulsation in the subclavian artery. Not more than two ounces of blood was lost during the operation. The wound was closed by the interrupted suture, and dressed with cold water, and an anodyne was administered.

January 17th.—Patient has had a more comfortable night than for several weeks before; wound united throughout nearly its whole extent; two sutures removed; he moves his head in all directions with as much facility as if his right sterno-mastoid had not been divided. Stimulants were freely given with full diet.

January 28th.—Ligature on the carotid came away to-day; he breathes quietly and has been very comfortable in all respects since the operation, with the exception of the continuation of the pain and numbness in the right arm and hand which he had for a long time before the operation.

Feb. 7th.—The nurse states that while dressing the wound this morning he removed the subclavian ligature, which was lying detached upon the surface of the wound, and threw it away; patient very comfortable.

Feb. 25th.—Since the last record the patient has had slight erysipelas of the right side of neck and face, and for two or three days has suffered from occasional paroxysms of dyspnœa similar to those which he had before the operation, but less severe.

He died from suffocation on the 26th February, 41 days after the operation.

Post-mortem, 24 hours after death. A careful dissection of the neck was made by Dr. Speir, Curator, and one of the physicians of the hospital, in the presence of Drs. H. S. Smith, Bell, Landon, and myself. The specimen showed aneurism of the arch of the aorta and innominate artery, involving the origins of the right subclavian and common carotid; the two latter vessels being separated where they pass off from the tumor, about one inch. The aneurismal sac was nearly filled with concentric layers of fibrine; the orifices of the right subclavian, right and left common carotids, were firmly closed by clot, the left subclavian being the only vessel arising from the arch of the aorta through which the blood could be transmitted. The clot in the right subclavian extended to the distal side of the vertebral artery; that in the right common carotid to the point at which the artery was cut through by the ligature, one inch above its origin, and from thence to the bifurcation into internal and external carotid. The right subclavian was pervious at and beyond the point to which I had supposed the ligature was applied, and the coats of the vessel exhibited no evidence of having been ligated. The brachial plexus of nerves and the omo-hyoid muscle were carefully examined, and found to be in a normal condition. The trachea was very much compressed by the tumor, and this was the immediate cause of death. The left vena innominata was obliterated. The left vertebral artery not enlarged.

Remarks.—The above case presents several points of interest. First.—The brain received its direct supply of blood only through the left vertebral artery, all the vessels going off from the arch of the aorta, except the left subclavian, being firmly occluded for a long time before death, judging from the appearance of the clots they contained. Notwithstanding this, the brain did not appear to suffer from a want of a due supply of blood; his intelligence was perfect to the last moments of his life.

Second.—The right arm, both before and after the operation, had the same temperature, judging from the sense of touch, and was as well nourished as the left. The blood must have reached it through the anastomosis of the right superior intercostal with the aortic intercostals, the anastomosis of the inferior thyroids, as well as the right internal mammary and epigastric.

Third.—To what was the second ligature applied? I am disposed to regard the suggestion made by my friend, Dr. Krackowizer, that it was applied to the *sheath* of the vessel, as the sheath was unfortunately not examined at the post-mortem,—most probable. The subclavian was situated at an unusual depth, and it did not pulsate decidedly where it was exposed, although pulsation was observed in the axillary before the operation. Every surgeon knows that the pulsation of an artery is much more distinct before it is uncovered than afterwards. Repeated examinations, made with the greatest care by myself and the House Surgeon, Dr. Shephard, failed to detect pulsation in the axillary artery after the operation. The pressure made by the displacement of the parts around the vessel appears to have been sufficient to arrest its pulsations.

The relief which the patient experienced after the operation, continuing until a few days before his death, was owing to the division of the cervical fascia and muscles, which permitted the tumor to recede from the trachea.

A CASE OF AMPUTATION AT THE HIP-JOINT FOR GUNSHOT WOUND OF THE HEAD OF THE FEMUR.

By H. A. DUBOIS, M.D.,

ASSISTANT SURGEON AND CAPTAIN U. S. ARMY.

Antonio Mutieries, a Mexican, aged about 33, employed by the Quartermaster's department as a teamster, was received into hospital, May 11, 1867. Early that morning he had had a difficulty with another Mexican employed in the same train, which resulted in his drawing a pistol upon his opponent, who instantly drew and fired his revolver at him, the ball taking effect in his left hip. I saw the case soon after his admittance, at about 11 A.M., and found the wound of entrance about two inches beneath and a little in front of the anterior superior spinous process of the ilium. He was suffering little, and there was little or no hæmorrhage. I enlarged the wound, introduced my finger, and traced the ball to the neck of the femur, where it was firmly lodged at the point where it joined the head of the bone. With a Tiemann's forceps I with some trouble removed the ball and a small piece of wadding. It was an ordinary conical revolver ball, and was fired at a distance not exceeding two to three yards. The man was kept perfectly quiet, a cold-water dressing applied, and he was fed with easily digested and nourishing food. At this time, and for the period of some two weeks, there was no inflammation involving the joint—a smart blow on the heel causing no pain.

The patient gradually lost flesh, but suffered little. The discharge from the wound consisted, for the most part, of ill-formed pus, having little smell, and occasionally streaked with blood. A few small pieces of bone were subsequently exfoliated. The patient slept little, and perspired much at night; his appetite also diminished, and he was evidently losing strength daily. In addition to the above symptoms, the following were afterwards superadded: Internal pain running up the side and down the thigh to the ankle, much aggravated by the slightest movement, or by the least pressure on the heel. These symptoms increasing, I proposed the operation afterwards performed, but could not gain his consent thereto, he informing my interpreter that he would be up and on his crutches in two weeks. I had previous to this made up my mind as to the propriety of amputating at the hip, and felt confident of ultimately obtaining the patient's consent, as a relief from the terrible pain suffered in these cases. I had rejected the operation of excision, as, in the only case in which I had performed it, it had caused a shock as great to the system as I believed would result from amputation; and though I found any number of authors who recommended excision in preference to amputation in this class of cases, I found also that they had, with few exceptions, never tried or seen it tried in cases resulting from gunshot injuries. Of the thirty-two cases in which excision was performed during the late war, four only were successful, and how far they succeeded in giving a useful limb is not fully recorded.

Surgeon J. C. McKee, U. S. A., visiting the post at this time, I asked him to examine the case, which he did, and advised amputation in preference to excision. Some ten days after I first proposed the operation, I obtained the patient's consent, and as I deemed it advisable, owing to the rapid loss of strength, that the operation should be performed as early as possible, I at once made my arrangements; and on the 22d of June, having obtained the assistance of Doctor Shout, of Los Vegas, Doctor Simpson, of Moro, and Hospital Steward Enfield, U. S. Army, I proceeded at 12.30 A.M. to amputate. I had had previously constructed by a blacksmith a rough clamp for compressing the aorta. The patient was quickly put under the influence of a mixture of ether and chloroform, removed to the operating-table, and all of my assistants having previously been informed of their duties, the operation was quickly and readily performed—the thigh being removed in, I am told, about fifteen seconds. The clamp controlled the arterial hæmorrhage well, in fact so well that it was extremely difficult to find out and secure the arteries; but the venous hæmorrhage was more troublesome. Some fifteen ligatures were used in all. Little blood was lost, however. The acetabulum was found much necrosed, and the tissues a good deal diseased. The diseased bone and tissues, as far as practicable, were removed, and a cerate cloth laid between the flaps, and the patient was then put to bed.

His condition during the operation was, on the whole, good, the pulse several times becoming extremely feeble, but it quickly rose again under slight stimulation. The breathing was free. The clamp, which made pressure one inch above and to the left side of the umbilicus, apparently caused no inconvenience, and certainly interfered little, if any, with his regular breathing.

The anterior flap was made long, while the posterior was made extremely short. The patient, before taking the anæsthetic, received hypodermically one-half grain of morphiæ sulph., and on recovering from their joint influence he said he felt no pain, talked, and seemed at perfect ease. He was given small quantities of brandy and beef-tea, also a little ammonia, as the pulse was feeble and rapid. He complained of great thirst, and craved ice, which was given him in small quantities. I hoped by these means to bring about reaction, and to overcome the profound shock under which his system was laboring. His pulse gradually became more feeble, ran up to 160 and 180, and became imperceptible; and yet he was lively, talked much, and was in every way perfectly sensible. He complained of hunger, said he was "as hungry as a dog," and rejected almost immediately everything he took into his stomach. In this

condition I resorted to hypodermic injections of tinct· opii, with the effect of bringing up the pulse, and quieting to some extent the irritability of the stomach. In this state he lingered about thirty hours, sometimes almost or entirely pulseless, but with a warm skin, and perspiring profusely; at other times with a quick, feeble pulse, sleeping a few moments at a time, until half past five on the evening of the day after the operation, when, taking a piece of ice in his mouth, he said, "I am going," and died almost immediately.

A post-mortem showed the flaps glazed to some extent, but not united. The acetabulum and head of the femur were both extensively necrosed, and the tissues much diseased. Wire sutures, it should be added, were used to close the wound, which was done some ten hours after the operation.

If the operation did not save the life, it at least promoted the happy dying (euthanasia), which Hippocrates says the physician should have as his second object—considering the saving of life his first.

FORT UNION, NEW MEXICO.

SYPHILITIC AFFECTIONS OF THE CONJUNCTIVA.

TRANSLATED FROM THE FRENCH OF M. LE DOCTEUR DESMARRES, PROFESSEUR DE CLINIQUE OPHTHALMIQUE, CHEVALIER DE LA LEGION D'HONNEUR, ETC.,

BY WM. MASON TURNER, M.D.

PHILADELPHIA.

CHANCRE.

WE have already, in our first volume, studied the syphilitic affections of one of the constituent parts of the visional apparatus (*Affections syphilitiques des paupières*, p. 620). Perhaps it will not be inopportune here to refer to a case, in which the chief symptoms of chancre, of undoubted genuineness, were found on the conjunctiva. This case has this curious point connected with it, that not only has the ulcer shown every characteristic of the primitive specific affection, but that it has been early considered as cause of a *foreseen constitutional affection*. Indeed for the one part, it was deep, its borders were perpendicular, the bottom was covered with the grayish, pultaceous matter, only found in primitive syphilitic ulcerations; and on the other hand, the indolent engorgement of the neighboring lymphatic glands (indolent non-suppurative adenitis) indicated clearly, after all, a small glimmering of the constitutional affection, which would soon show itself by pathognomonic phenomena, and which would demand an appropriate constitutional treatment.

Facts of this species being sufficiently rare, we will report *in extenso* this experience, the details of which are sufficiently complete, sufficiently retrenched, to enable us to dispense with tracing a general history of chancre of the conjunctiva.

CASE I.—On the 31st July, 1854, Madame M., embroiderer, aged thirty-four years, presented herself at my clinic.

In the large angle of the left eye, in the depression at the internal extremity of the upper eyelid, there was a tumor of the size of three hemp-seeds, presenting the form and appearance of an inflamed follicle. The swelling in the neighboring parts was very considerable; the tissues were of a vivid red; the central part of the tumor was much more prominent than the circumference. The portion of the conjunctiva which surrounded and completed the *cul-de-sac*, was likewise very red; the carunculus was tumefied, and the eye constantly wet with tears. Touch of considerable pressure produced no pain. The patient could give no satisfactory account of the affection. Believing it to be nothing more than an inflamed follicle, accompanied by an intense conjunctivitis, I was induced to prescribe a collyrium of the subacetate of lead for fomentations, and cataplasms made of the ashes of lettuce leaves, to be placed over the left eye at night.

On the 4th of August, the patient returned to the clinic. The most salient part of the tumor had ulcerated. The loss of substance, of about one *centimètre* in size, measured nearly the entire diameter of the tumor which has been described. Its aspect was characteristic; the borders were abrupt and perpendicular; the bottom was covered with a yellowish-gray matter, precisely similar to that which we see in primitive syphilitic ulcerations. At the same time I determined a manifest engorgement of the lymphatic pre-auricular and submaxillary glands, painless and accompanied with no change of color in the dermis. Of course, I was no longer in doubt, and for my first diagnosis I unhesitatingly substituted this: *specific* ulceration of the conjunctiva. Inflammatory symptoms being very marked, I directed the continuation of the emollients, and prescribed in addition, wherewith to bathe the eye seven or eight times a day, the following collyrium:

℞. Aquæ destil. 100 gram
Hydr. chlor. corros. 0.05.
M.

and directed the patient to take a Sédillot pill, night and morning. (This pill is sometimes called the *saponaceous mercurial pill*, and is as follows: unguent mercur. (equal parts) 12 gram., sapo. medicat. 8 gram., pulv. glycyrrh. 4 gram., M; ft. pil. of 20 centigrammes each. Each pill contains five centigrammes of mercury.—*Translator.*)

On the 7th, the ulcer was in the same condition. The gums were swollen a little and showed signs of commencing stomatitis mercurialis. The pills were discontinued; gargles of water, and vinegar of squills, with sarsaparilla as a drink, were ordered. On the 9th I examined the patient in consultation with M. le docteur Clerc, who recognised at once, with me, the apparent characteristics of chancre in the ulcer, but did not venture to affirm anything definitely as to the nature of the affection, without a new examination, to be repeated after some days; he advised solely a purely expectant treatment. Emollient fomentations, and a collyrium of borax, were ordered.

On the 24th of August, my honorable *confrère* sent me the patient with this note: "There is nothing to suspect from the appearance of the genital organs; the persistence of the auricular adenitis, and the adenitis of the walls of the mouth, creates a presumption of a constitutional infection, which, in a word, will not be well before a month." Finally, on the 21st September, Madame M. returned to see me, with this diagnosis from Doctor Clerc: *Papular lenticular syphilide.* The mercurial stomatitis, having been cured for over three weeks, the patient was subjected to a treatment by the prot-iodide of mercury.

On the 29th of the same month, the ulceration of the conjunctiva had completely cicatrised. The papulous syphilide diminished rapidly, and the auricular ganglion was in the way of improvement. It is needless to say that the most pressing questions addressed to the patient, failed to produce a satisfactory response as to the *origin* of the complaint.

In our first article on syphilitic ulcers of the eyelids, we noted a fact of the same nature as the preceding, observed by us in a midwife (*sage-femme*), and whom we sent to our *confrère*, M. le docteur Pajot, *Professeur*

agrégé d'accouchements to the Faculty of Medicine of Paris.

Below I append a little history of this other case, which one cannot, without some interest, compare with that which has been given.

Case II.—Madame G., *sage-femme*, aged thirty years, of a lymphatic constitution, of good general health, very regular, and never, as she assured us, had been sick at all. She was not subject to rheumatism, and showed no traces of engorged or suppurative glands. She presented herself at the clinic, for the first time, on the 2d of February, 1852. Her left eye had been ailing for fifteen days. The inferior palpebral conjunctiva had been much swollen during this time. There had been no pain, and none existed at the time she came to the clinic. In the middle of the conjunctiva, in the inferior *cul-de-sac*, was a tumor, a little elongated, about the size of a garden pea, and at the summit of which was an ulceration showing ragged and perpendicular edges, and giving out a little pus. This tumor, we said, made substance with the conjunctiva, under which it was imbedded, in the form of a *spindle;* it adhered completely to the mucous surface. It showed exactly the characteristics which a primitive specific ulceration on the preputial mucous tissue would present. The eye was very red, and secreted a little, especially at night (*palpebro-bulbar conjunctivitis*).

A large pre-auricular ganglion, of the size of a full grown hazelnut, which could be felt under the finger, aided in the diagnosis. In the meanwhile, as the patient could not recall any recent *accouchement* with infected women, on whom she had attended, and as she affirmed that she had not submitted to any suspicious embraces, I sent her to M. Ricord, who, after an attentive examination, returned her to me with the following diagnosis: chancre of the conjunctiva, with its symptomatic adenitis. Following the advice of my wise *confrère* and friend, I cauterised the ulceration on the 3d of February with nitrate of silver. On the 4th, ten leeches were applied over the pre-auricular ganglion; on the evening of the same day, a saline purgative was administered. On the 5th the ganglion was less tumefied; the conjunctival tumor had not improved in diminution. I am ignorant how this case terminated, the patient failing to return to the clinic.

These two cases, similar in detail to those with which I commenced to speak of chancre of the eyelids, appear to me sufficient to complete the history of chancre of the conjunctiva.

Syphilides.

I have never had occasion to observe the *pustulous plates* (*plaques musqueuses*), nor, as A. Smée, the coppery eruptions (IV *Annal. d' Ocul.*, vol. xiv., p. 31), on the oculo-pa pebral conjunctiva; but in the generality of cases, I have found on this membrane, tuberculous syphilis. For instance, an example: A man, an old *valet de chambre* of the Duke of Montpensier, came from Spain to Paris to consult me in regard to a grave affection of his eyes. When I saw him for the first time, he was suffering with a double iritis, which became very intense, especially on the left side. The pupil was not slow in closing, and I perceived upon the iris those tumors which I have described under the head of *condylomes*. One of these, larger than the others, situated to the outer side, made a protuberance under the conjunctiva, through the sclerotica. At the same time on all sides of the conjunctiva, I saw raised above the level, small indolent tumors, very hard, oblong, exactly like syphilitic tubercles, which, as those to the side of the ocular apparatus, covered equally the integuments of the body. The skin of the eyelid was pierced through and through. This man, whom I saw with M. le docteur Horteloup, *Médecin de l'Hotel Dieu*, was in such a weak condition, that we deemed it dangerous to resort at the time to a specific treatment, on which we had not indeed decided, except conditionally, the patient asserting in the most energetic manner that he had never had any symptoms of primitive infection. I have learned since that the patient (who quitted us) was treated by Dr. Boinet. At the very beginning he instituted a specific treatment, and performed in the end a complete cure. The left eye, however, remained entirely lost. I have likewise determined for myself the cure, for the patient revisited me many months afterwards. Here the success obtained by antisyphilitic medication was a proof that, notwithstanding denials on the subject, we have had tuberculous syphilides of the conjunctiva.

SUCCESSFUL OVARIOTOMY.

By HAZARD A. POTTER, M.D.,

Geneva, New York.

Jane Kielte, aged 38 years, unmarried, has been suffering with ovarian dropsy for the past two years. The disease having reached that point where an operation becomes the only alternative, I decided to operate, which I did on the 23d ultimo. Chloroform having been administered by Dr. George N. Dox (to whom the patient belonged), an incision was made, about four inches in length, between umbilicus and pubes; slight adhesions were separated with the hand, the fluid evacuated, and the right ovary removed. The tumor and contents weighed eighty-five pounds. The left ovary, being diseased, was also taken away. The pedicle was about five inches in breadth. I divided its peritoneal covering by a slight stroke of the knife, and ligated the pedicle with its main artery, and also one smaller artery, by separate ligatures, between the incised peritoneal edges. The ligatures were removed through the incision.

From experience, I am led to the opinion that when any portion of the peritoneum is ligated, the causes of peritonitis are greatly multiplied, and the chances of recovery correspondingly lessened; the character of that coat is such as to resist the removal of the ligature for a longer time than is usual when arterial or other tissues are ligated.

I divide the peritoneum entirely around the pedicle, ligating separately any smaller arteries that may be cut, tie the main artery between the incised peritoneal edges, and thus exclude the peritoneum from the ligated parts.

The actual cautery, clamp, and other appliances, which have undoubtedly been made effectual in some cases, are scarcely equal to the well-tried ligature, which has so long and so successfully met the demands of surgical science and art. The mortality in ovariotomy arises not so much from the immediate effects of the operation, as from the morbid and debilitated condition of the system when the operation is performed.

Remedial measures are tried until every hope is banished, and when the unfortunate patient dies after ovariotomy, surgery is condemned for its inability to save life which was already a forfeit to disease. By operating as early as possible, we may modify to a great and favorable degree the mortuary statistics of ovariotomy.

It is now eighteen days since the operation, and our patient has made a rapid recovery.

Geneva, N. Y.

TRAUMATIC DESTRUCTION OF THE POSTERIOR PORTION OF URETHRA,

SLOUGHING OF SCROTUM AND RESTORATION OF PARTS.

By GEORGE WILSON, M.D.,

NEW YORK.

The case was one of traumatic destruction of the posterior portion of the urethra of some ten inches in extent, with sloughing of a large portion of the scrotum, so that both testes were freely exposed to view, with restoration of the continuity of the parts. A young man, about twenty years of age, a painter by occupation, was engaged on a warm day in June, in painting the front part of a three-story house. At the time of the accident, he was standing on the window-sill of the second-story painting the outside sash; on raising his hand up to push down the top sash, he lost his balance, turned a somerset as he fell, and landed astride the iron railing in front of the area, which was slightly bent by the weight of his fall. He was conveyed to his house; and on examination, I found a fracture of the pelvis on the right side through the pubic portion—with laceration of the lower portion of the penis involving the spongy, and as I afterwards thought, the bulbous portion of the urethra, with severe contusion of the scrotum and testes, so that through the wound there was a strong seminal odor, which at the same time caused me considerable uneasiness for fear of loss of one or both testes. After bringing about reaction, which was very slow, however, the nervous shock being so great, the first thing he complained of was a feeling of fulness in the region of the bladder, with a desire to urinate, and an inability to do so. After some difficulty, I finally succeeded in introducing the catheter, and drew off a large quantity of blood, which, from the heat of the body and the weather was inclined to coagulate, and which added greatly to the difficulty of getting it to flow through the catheter. I judged from the hæmorrhage, that the bulbous portion of the urethra was involved in the laceration, and that the hæmorrhage came from the artery of the bulb. In the course of a couple of hours I again introduced the catheter, and found that the hæmorrhage still continued, and drew off a considerable quantity more of blood. I then surrounded the scrotum and hypogastric region with pounded ice, and allowed the catheter to remain in the bladder, and in this way I finally succeeded in arresting the hæmorrhage. At the same time I kept giving him stimulants, and in that way managed to keep the life in him, which at times seemed to be fast ebbing away. The next morning, I was suddenly called to see him, as his attendant thought that he was dying, and I do assure you he was very near it. I was by his bedside, and gave him carb. ammonia dissolved in brandy and water until he gradually rallied; he had one more sinking turn, and after that he went along and made very fair progress towards recovery. The contused parts went on sloughing, so that finally the catheter was exposed for some two inches in extent; then followed purulent infiltrations in the scrotum, which were relieved by free incisions; then came sloughing of the scrotum in which both testes were freely exposed, so that as the scrotum lay upon a cushion which supported it you could take them between your fingers. The catheter I kept constantly in the bladder, removing it about once in twenty-four hours, as at the end of this time there was considerable deposit of earthy phosphates upon the end of it, which caused considerable distress to the patient on withdrawing it, and also retarded very much the healing process, owing to the rough accumulation lacerating the parts on its withdrawal, and undoing all that I had done in getting the parts to heal. But by steady perseverance day by day, we gained little by little; the parts began to heal kindly, the deposits on the catheter grew less and less, and still keeping the catheter in the bladder until the parts had all grown over it, and by drawing the scrotum together, we succeeded in getting that to heal also with nothing to open; so that to all appearances he was as good as ever, as far as practical purposes were required. The testes gave me no trouble, and I presume that they were in their normal condition. He got married afterwards, but whether he ever had children or not, I do not know. The fracture of the pelvis I treated with a broad leather belt, which was made to buckle snug around, and which answered all the purpose for which it was required. I attribute the recovery in this case in a great measure to the patient himself. At the time of the accident his system was in a very good condition; he possessed a great deal of nerve, very sanguine and buoyant in his temperament; he had a good deal of what is called *vis vitæ* or tenacity of life. Had he not possessed this physical organization, he would most undoubtedly have sunk; but possessing it, he rallied, clung to life, and recovered.

Original Lectures.

ON NECROSIS AND REPRODUCTION OF BONE.

DELIVERED BY

Prof. JAMES R. WOOD, M.D.,

AT BELLEVUE HOSPITAL, N. Y.

Gentlemen—I propose to say a few words to you this afternoon on the subject of mortification, caries, and reproduction of bone. Ulceration in the soft parts has its analogue in the osseous tissues, and is known by the name of caries. Then again you have the compact, bony tissues dying as well as the softer ones, and this death is called necrosis. They slough as the soft parts slough, and are cast off, thus constituting what we call exfoliation. This state of things, produced in consequence of violence, may be due to constitutional troubles, or mechanical and chemical agents. The bone may be injured, so that that which begets bone (the periosteum) may be directly destroyed by the violence inflicted, or by the inflammation which takes place subsequently; consequently, this injury to the periosteum and the endosteum will cause necrosis on the one hand or caries on the other. If the man is of a strumous or scrofulous diathesis, he may have this peculiar vice engrafted upon the periosteum or endosteum, and he will have what is called the strumous or scrofulous necrosis. A man who has the tertiary form of syphilis, will have a peculiar inflammation of the pericranium, or what is called corona veneris, or inflammation of the periosteum, or any of the other superficial bones; or he may have what is called a node. Then you will see cancer and heterologous deposits in and upon bone, producing necrosis and mortification. In other cases you will find, as in this specimen I show you, the effect of the chemical agent, phosphorus. The fumes of phosphorus killed this jaw, after exciting inflammation in the periosteum.

We commence with the proposition, that no matter whether the periosteum be superficial or central, upon the surface of the bone, or lining the medullary canal, this fibrous membrane is the matrix of bone; and without it you cannot have osseous tissue. You may have the various salts of lime or calcareous deposits

taking place independently; but without the agency of the periosteum no Haversian canals are produced —in a word, true bone is not there. It is the disease of this matrix, this mother of bone, that causes necrosis. If you interfere with, and separate the pericranium and the dura mater, the external fibrous covering of the brain, you cause the death of the bone. Precisely this occurs in Pott's tumor of the scalp. There is more or less contusion at first; then after a few days or weeks there is considerable pain at the point of injury; and by and by the brain is disturbed, and soon after he will have a rigor; and upon examination there is a little puffy tumor of the scalp. What has taken place? The pericranium has been separated from the bone; and you will find that this tumor is always an index to trouble like this. It tells you that the bone has been robbed of its periosteum or pericranium, and that there may be trouble below. The constitutional symptoms also direct you to this. You cut into that tumor, and what do you find? You find bone like ivory in color, presenting none of those little red points which are shown in bone that is covered by this fibrous tissue, or pericranium. You cut through this, and you find that the pericranium has separated from the bone, and that there has been suppuration here, shown by the presence of pus.

If the external periosteum be diseased, contused, or inflamed, you will have what is called peripheral necrosis—necrosis confined to the outer layers of the bone. But if you have the internal covering of the bone, the endosteum, diseased or inflamed, and separated from the bone, you will have internal necrosis, or you may have death of the whole bone. In the first instance you will merely have, what you saw in a case a few days ago, where I chiselled out a portion of the tibia of a man who came here to have his leg amputated because of this disease. I chiseled away the necrosed portion of the bone, and found that it was a case of peripheral necrosis. He had talipes equinus, for which I cut the tendo Achillis; and now the patient is able to put his foot upon the ground; and I find that the periosteum is extending itself, and covering up the opening in the bone, filling up the gutter made by the removal of this necrosed tissue, and he will soon have a very good leg; much better than any artificial limb that could be made.

Let us see what will take place if the bone dies. Suppose, for instance, there is inflammation in the external and internal coverings of the femur, the periosteum and endosteum; the result will be as I show you in this case. I examined this case from time to time—the stump was not closed, as it was at a time when we had a great deal of trouble here because of pyæmia; and I saw this bone cast off because the endosteum and periosteum were separated from it. The patient died; and you see in this specimen how beautifully nature sawed through that bone. The bone separated just as the soft parts separate when dead, the absorbents doing their part here also. Up to the limit of destruction or separation of the periosteum, there is death. Here the line of demarcation is formed, and the periosteum throws out a soft pulpy matter which is deposited between the healthy and unhealthy tissues and the absorbents, and saw through the dead bone and set it free. They did so here, and I removed this piece of necrotic tissue.

It is because of this pathological condition of bone that the great majority of amputations are performed; and until very lately advantage was not taken of the physiological functions of the periosteum, little respect was paid to this insignificant membrane, and reproduction of bone was not sought after.

You will find, if you look through your works on surgery, that statistics will show that the great majority of amputations, except in time of war, have been performed for necrosis of the bone. Surgeons have heretofore cut without regard to the periosteum; they have looked for the dead bone without any respect for that which in the beginning makes the bone, and that which only makes it to the last. You will find in your operations for necrosis, that if the periosteum is not respected, you will increase your original trouble, and may in the end have to resort to amputation.

I used to amputate such limbs, within these walls; and I am sorry to say that I have cut off a great many limbs that I perhaps ought not to have removed. But I did this in accordance with the best knowledge we then possessed, believing in common with others that unless I did so my patients would die; and they would have died, had I done nothing. The periosteum was being destroyed, and this destruction of bone and periosteum was extending to the joints; and when the joints were affected, the constitutional trouble was so great that unless I amputated the limb my patient must succumb. But I am glad to be able to say that it is not a common thing for me to perform an amputation now. Conservatism in surgery is being established, which allows us to cure these cases by a knowledge of the physiological function of that little thin and insignificant membrane which is spread over the bone and lines the medullary canal of the bone. You are to be careful to preserve the periosteum. If you have a patient with deep-seated agonizing pain in the limb, with rigors which do not observe periodicity; though you may not observe periostitis, do not wait for matter to come to the surface; do not wait for this matter to bore through the bone, and then through the periosteum, separating it from the bone, and macerating and digesting it, until there is nothing left of it, as we once did; but cut down upon the bone as you would in syphilitic periostitis, or in the old Corona Veneris. Cut down through the periosteum to the bone, and let the matter escape. Make free that tense membrane which is producing all these constitutional troubles, and if this pain is persistent, it may be necessary to take a small trephine and cut down into the medullary canal. In many cases, before you reach this canal, you will prove the correctness of your diagnosis; you will find that there is a bony abscess there, and periosteal inflammation. In this way you can save a great many limbs; and even after a large portion of the bone is mortified, you will be enabled to save the limb, and to reproduce the parts destroyed.

You see, in specimens, numerous openings leading to the internal portion of the bone. These canals leading from the periphery to the centre of the bone, allow the matter to escape. Nature has done this, and has told you what you ought to do. She does it with the absorbents; you are to do it with the scalpel and trephine.

Take for example a simple whitlow. Some of you, I presume, can hold your crippled fingers up as monuments of bad surgery. Many of you have had periosteal inflammation; matter has formed beneath the periosteum of the last phalanx, if it be in that locality, and has been allowed to remain until the bone has been destroyed. Now, if you had only carefully enucleated the periosteum from the bone, although it were dead it might have been taken out and another one been produced. We do it here in the hospital every day. This fact is important. Supposing a man has whitlow on his index finger, it is important that the last phalanx should be preserved. All of it should be preserved, especially in a mechanic. This is a rule which you should always observe. Every line of the finger on the organ of prehension of the laboring man is of the most vital im-

portance to him, and hence you cannot be too careful to treat them properly.

Let us now consider the reproduction of bone. I have been engaged for the last twenty years in reproducing bones, and with success, as my specimens will show. It was not until I had read Duhamel, that I conceived the idea that this subject would be of so much value and importance in the saving of life and limb. Up to the time of Duhamel I will say nothing with reference to the experiments on the reproduction or growth of bone. He taught that the periosteum produces and reproduces bone; and if you look over the literature of this subject, you will find that he had a very warm contest with Haller and his contemporaries, because he sought to give the importance to the periosteum that he did. Duhamel and Flourens by experiments upon beast and bird, proved beyond a doubt that periosteum was the agent that reproduced bone. He looked at fractures and noticed what occurred after the accident. He saw that there was a thickening of this periosteum; that while in the normal state it was so thin that it was difficult to remove it from the bone, it had now become much thicker, and he became convinced that this was the matrix of the bone. He tried experiments upon rabbits, fracturing their limbs; exsected portions of bone from a number of animals, and united the parts by a reproduction of bone depending upon the periosteum. Sides were taken, and a great deal of controversy was the result of this theory of Duhamel's. In 1847, Flourens, of Paris, published his experiments and their results to the world; having practised all of Duhamel's experiments, and duplicated them, he established beyond a doubt that not only the periosteum reproduces bone, but also the lining of the medullary canal, the endosteum. Before this work appeared I was engaged in study upon this subject, and I examined a great many fractures to ascertain how the callus was formed, and what deposited this callus, and I went so far as to separate all the soft parts except the periosteum from the fractured ends of the bones, and placed the parts in such a position that I could see, from day to day, and from hour to hour almost, the process of reproduction. I performed a number of experiments upon bone; and became satisfied that there was a great deal to be practised that would be conservative in surgery, and that would save life and limb. I therefore commenced the enucleation of bone. I had read all I could find upon the subject, and consulted John Heunter, and many other authors; [and there was but little in our speciality of the profession that he did not investigate intelligently, although but a carpenter by trade.] You will find that at an early period he burned with the actual cautery the foot of an ass, and destroyed the soft parts including the periosteum, leaving the bone dead below, and he saw that the periosteum and adjacent tissues, as he thought, reproduced bone, and thus filled up the chasm which had been made by his actual cautery.

I do not propose to-day to treat this subject *in extenso*, but to illustrate all that I have said, and more too; by the experiments that I have made, I have reproduced nearly all of the bones of the body, and have the proofs before you that what Duhamel and Flourens did upon the brute and the bird, I have done upon the human subject.

The experiments which Duhamel made were with a view of proving that the periosteum was the matrix of the bone, and that it was the only organ that reproduced bone. But Flourens believed that there was a tissue within the bone, a tissue comparable to the periosteum that would also produce bone, and he made his ingenious and beautiful experiments to prove this. He drilled a hole through the bone and introduced into it a silver canula; he then separated the endosteum from its connection with the bone, and left this canula in this position. By-and-by it grew little by little into this canula, and made its appearance at the outer opening. He united this with the periosteum, and he secured a bony connection between the periosteum and the endosteum, growing through this canula. He then promulgated to the world that he could make bone, multiply and duplicate bones at his own pleasure—and he told the truth, for it can be done.

Now I wish to refer to the recent theory, for such it should be called, with reference to the internal periosteum. It has been taught by one or two physiologists that there is no internal periosteum, but that there are what are called bone cells in this medullary tissue, and that when these cells are inflamed bone is deposited, and in this way the internal growth of bone is established.

Fifteen years ago, or a little more, there was a patient in this hospital who had phthisis, and an abscess formed on the side, opened, and led to necrosis of the rib. I carefully took out this piece of necrosed bone from this rib, and in the course of eighteen months this poor woman died. I examined and found that a portion of the rib had been reproduced perfectly, as you see here, by the periosteum which I had left. The continuity was perfectly established, and I was, of course, made glad by my efforts, and encouraged to go on. And I have done so, and established the continuity where it was lost, in many of the bones of the body. Now these facts speak for themselves, and we cannot do away with them. They are truths, and they are now being realized as such by the profession.

Here is a specimen taken from a case in which I removed the greater portion of the clavicle, leaving as much of the periosteum as I could; and you see how bountiful nature has been, or how bountiful this matrix has been. She has given us an exuberant quantity, it is true, and shortened the bone a little; but she has made firm the continuity which she has established. This is really a beautiful effort, and let me assure you that having become engaged in this process of nature you will become so enamored with it that you will hardly be willing to amputate a limb, or to perform a surgical operation where the periosteum is implicated, unless you have previously made an effort to save it.

Here, gentlemen, is a patella which was taken from a child about ten years old. The bone was very much diseased, and I cut down to attempt to free the abscess in which it was swimming, and being digested. I saw that there was inflammation about the joint and synovitis; but the ulceration did not extend into the joint, nor did it extend through the periosteum and the tissues which surround the patella. I enucleated this; and after several months, when it was presented in this theatre, the patella was twice the size of the opposite one, but all the motions of the joint were complete. It is well known that ordinarily when a disease of this kind obtains, amputation is, or has been, almost uniformly the result. But it is now an established point that with care you can make a new patella.

Here is a portion of bone which I removed from an old lady by enucleation; I separated the periosteum from the bone; and although the bone would not sustain itself after I had removed this portion, I succeeded, by splints, in keeping it in position until the periosteum had deposited sufficient osseous tissue to give her a good and substantial arm.

I have here also, portions of the tibia that I have removed; and in all of these cases new bone has been

produced. Here you see nearly the whole of the tibia has been removed. This specimen proves, not only the doctrines of Duhamel, practised by Flourens, but it also proves the experiment that I alluded to as bearing upon the function of the internal fibrous membrane, whether it be periosteum or bone cells. The next is a specimen taken from a man whom I found in this hospital some years ago, who had his leg jammed. He stubbornly refused to have it amputated. I saw him in the hospital, and found upon examination that the periosteum had not been destroyed, although nearly the whole of the shaft of the bone was dead. Little islands of bone were found deposited under the periosteum in that pulp which is secreted and deposited, and which beomes periosteum and bone. You see here that we had an internal growth of bone, and subsequent death, and the internal periosteum contained this sequestrum. Here is nearly the whole of the tibia, which I removed; this beautiful specimen shows the death of the old bone, and the effort which was made by nature before death, to make a bone within the old bone; resulting, as you see, in the formation of a shaft which nearly fills the medullary canal of the tibia in which it was formed. I enucleated the periosteum from this bone, and gave the man as good, and a stronger leg than the one which was not diseased, because where you reproduce such tissue the bone is always larger.

These different bones are reproduced, gentlemen, and the patients leave the hospital perfectly well; and this subject might be continued until I had shown you specimens of all the bones of the body which have been removed in this way and with this result.

In using your instruments for separating the periosteum from the bone, you should take great care, and wait until it has gained some firmness, because of the deposit you are anxious to effect, or you will destroy this new bone. Therefore, you are to treat it very kindly, to enucleate it gradually, and at long intervals, with the instrument best adapted to the case; and as you separate it you discover that it becomes hard, and you completely pass around the bone in this way.

In this case occurring in the thigh, a portion of which I show you, I cut down upon the bone, and found between it and the periosteum, matter. An opening was made, extending from the periphery to the medullary canal, incising the periosteum about four inches; the bone was found dead. I enucleated the periosteum from time to time from this segment of the femur, and found a fistulous opening extending to the medullary canal, and saw the periosteum throwing out crystals of bone, if you will allow the term, until a new femur had formed. At the time of the operation by which I removed this necrotic mass, the new bone was about half an inch thick.

Now, how would you remove that bone? How could I get that bone through without destroying the new bone? This opening was at the lower extremity of the diseased bone. With a small trephine I made an opening through the new bone down to the old one, opposite to the opening which existed, and then, with a chisel and saw, I mortised out a piece of the new bone; and reaching the dead bone, removed the segment of this femur, comprising the whole circumference of the bone, and being about four inches in length. Now, my patient had as good a femur as he ever had; the bone was firm, and he walked without any trouble, and without limping. There are very few thighs saved where this condition of things exists, unless the surgeon has fully considered the physiological function of this maker of bone Now, if I had attempted to remove this dead bone, which I hold in my hand, before the new one was sufficiently deposited, I should have destroyed all chances of saving that man's limb; but by careful enucleation practised for some two months, the result desired was obtained.

I have here all of the superior maxillary bone of the right side except the orbital process, and a portion of the superior maxillary bone of the left side. The patient from whom this specimen was taken was a lady who had inflammation of the periosteum and loss of her teeth, and came to me with disease of the superior maxillary bone. I made an incision along on the side of the gum cutting down to the periosteum on the inside and outside, and by enucleation separated this bone, and as I gradually separated the periosteum from the bone, the bone became hard and dense, and she had a new jaw without any deformity. She wears artificial teeth, and you would not dream that she had lost her jaw.

Here is a specimen taken from a patient from whom I removed the whole of the lower jaw. I wish you to remember the importance of making your incision in this operation, beneath and behind the jaw as much as possible, in order that the cicatrix, when it forms, shall not disfigure the patient.

I have here two jaws which were recovered from the effects of vapor of phosphorus. In this case, which was of a young lady, the periosteum was enucleated and the reproduction of a new jaw was the result, with very slight, if any deformity. This girl, when she got well of this operation, left the hospital with a new jaw, returned to her old friend and employer, and again engaged in the manufacture of lucifer matches. She had a decayed tooth in her upper jaw, which was removed, and the vapor then attacked the periosteum of the left upper jaw, and I removed the most of this, and reproduced the jaw. So I not only reproduced this portion of the upper jaw, but the whole of the lower jaw complete, and I believe this is a unique specimen.

In this other specimen which I show you of the reproduction of the lower jaw, all its motions, functions, and processes are complete. You see the processes to which the muscles passing between the hyoid bone, the tongue and jaw, are attached, and you observe that the coronoid processes are perfect, reaching up under the zygoma; and more than this, you perceive, what is denied by many, that the surgeon can reproduce a joint. Many operators will tell you that you cannot reproduce a joint where you have removed the bones forming it. But you see here the condyloid process shining beneath the synovial membrane, with the cartilage of incrustation and the ligaments attached to it, performing all their functions. The synovial membrane, the cartilage of incrustation, and the ligaments, are intact, and all the functions of the jaw are perfect. This poor girl died subsequently of abscess of the brain.

You can even do more than this sometimes. I was asked by a gentleman, who had heard me describe this operation and its results some time after that reproduction of the lower jaw, "if the teeth were through yet in the new jaw?" I told him they were not. But, gentlemen, I have left the old teeth in the new jaw; and this specimen was taken from a patient that I operated upon in this hospital with this result. I enucleated the bone, and found that the four incisor teeth were becoming firmly attached to something. I separated carefully the bone beneath the periosteum which was becoming solidified, and I discovered that the teeth were being embraced by the new bone, that it was forming a cast round about the teeth, and at the time of the operation, after I had enucleated and made solid the periosteum, I lifted the old bone out, and left the patient's teeth in the new jaw! Eighteen months after this operation my house surgeon, Dr. Phelps, and myself saw

her, and the teeth were very firm, and as useful as they were in their old place.

There is a point to which I wish to call your attention, viz., with reference to the notions of those who did not believe that the periosteum and endosteum produced bone. They contended that the periosteum and the tissues in the neighborhood of the bone reproduced it; and before, at the time the chemist discovered that there were such deposits as calcareous deposits, this was brought up as proof that the tissues in the neighborhood of the bone reproduced bone, as well as the periosteum. This specimen is simple and to the point. Here was an extensive abscess forming in the bone, and going through, making an opening at or near the lower end, like a tent, separating it, as you see, some inches from the bone. I found new bone was forming in this extended periosteum so remote from the bone, layer after layer; and in this way was produced this bone which I show you. This to a great extent explains away and disproves the theory that other tissues than the periosteum reproduce bone.

We have also seen that the periosteum will not only reproduce bone, but will extend itself, covering the bone, and extending itself over the ends as well as the lateral portions of the bony tissue.

Now I maintain, that when the periosteum is inflamed or lacerated it will grow into other tissues, if allowed to do so. Here is a case of luxation at the hip, occurring during morbus coxarius. You see the upper border of the old acetabulum destroyed, and you see here a partial dislocation upwards of the head of the femur; and the ligaments, because of the periosteum that has been extended to them, have ossified; and in this hard and ossified material you may discern the impression of the fibres of the capsular ligament, and the cervical ligaments.

I have two more specimens that I wish to show you before closing these remarks. This leg was taken from a boy who had a strumous cachexia, who had periostitis and ostitis. I made an incision the whole length of the tibia, and through the periosteum down to the bone, which was dead, and a portion of the periosteum on the anterior surface of the tibia was also destroyed. Nearly the whole of the tibia died. The boy was weak and feeble, and I gave him nourishing diet—iron, phosphates of lime, and everything that could nourish him, and make his blood plastic, and calculated to administer to the wants of the periosteum; and then I commenced enucleating the periosteum from the bone—and you see how far I had advanced. I had enucleated the periosteum from time to time on this dead bone—and you see the new bone is deposited in it—all along the side of the tibia, and in a little while I should have had that dead bone out, and a new tibia formed there in its place. But one day I was called to see him as he had had a rigor and terrible pain at the upper and lower end of the tibia; and his ankle-joint was terribly swollen. I found there was synovitis about the ankle, and that his constitution was terribly shocked by what was going on. There was matter in the joint, and to save his life I amputated the thigh. On making section of the bone I found tuberculous deposit at the lower end of the bone communicating with the ankle-joint—and also a tubercle deposited at the lower end of the tibia.

I have a great many other beautiful specimens by which I can illustrate this important subject; but I only propose to-day, to give you an idea of what can be done in the way of conservative surgery, by the reproduction of bone. I can exhibit to you but one more specimen, and give you the history of the case. This portion of the thigh bone, about six inches in length, I enucleated in a man upon whom I finally performed amputation. The bone died, the stump was not closed, and I had an opportunity of watching the growth of new bone from the time the old bone became necrotic, until I removed it by enucleation. In this case at the time of enucleation there were three firm, well formed bony cylinders; the first and peripheral, formed by the external periosteum; the second, the sequestrum of the old dead femur; and the third, formed by the internal periosteum and bone-cells. From between the first and second I removed this, the old femur, the specimen I now present to you. The thigh bones, for we must use the plural here, are at least four times larger than the original femurs. This is one of my most valuable specimens, as showing the reproduction of bone, and deposit of tuberculous matter in bone.

Reports of Hospitals.

JEFFERSON MEDICAL COLLEGE

OF PHILADELPHIA.

Surgical Clinics of Prof. Gross.

ENLARGED SPLEENS—DIFFERENTIAL DIAGNOSIS FROM OVARIAN AND OMENTAL TUMORS.

Case I.—*Enlarged Spleen.*—August T——r, æt. 25, employed in a manufactory of gas fixtures, has been in the U. S. service four and a half years—temperate in his habits. He was sick seven or eight years ago, and says he took a great deal of quinine, his account of his case pointing to a probable attack of intermittent fever. There is great enlargement of the abdomen, with an appearance very much that of ascites; and on examination, though there may be water present in the abdomen, this is by no means the sole cause of the swelling. There is a tumor occupying a large portion of the umbilical and left hypochondriac regions, and a portion of the iliac region. The tumor projects towards the right side of the umbilicus, and its outlines can be distinctly defined when the limbs of the patient are flexed so as to relax the abdominal muscles. It is a sharply defined tumor, projecting back into the ileo-lumbar region a considerable distance, under the ribs of the left side as high as the ensiform cartilage. Its surface appears to be uniform, there is no nodosity, no lobulation of the surface, it is perfectly smooth, and its edges sharp. It is more distinct on the outside of the tumor and below, not so much so above. The patient is feeble and emaciated, and has lost a good deal of flesh. He complains of having terrible pains last week, which he describes as "frightful, so that he could not rouse himself on account of them." When the weather changes, his pain increases. Appetite tolerable, tongue somewhat reddened, moist, and expanded; bowels regular; sleep poor; urine brownish-yellow, about a quart being voided every night; no cough, no palpitation of the heart; no fever at night, but a good deal of perspiration. The probability is, however, that there may be a slight febrile condition at night without the patient recognising it.

The history of the case points to the nature of the enlargement. We have reason to believe that the patient suffered seven or eight years ago from intermittent fever; which, when long continued, is likely to give rise to enlargement of the spleen, which is a fact very well known; and this enlargement frequently continues to an enormous extent, so that it may acquire a weight of five, eight, ten, or even fifteen pounds. This tumor will be hard, firm, and resisting, and will extend by and

by in every direction, so as to encroach on the diaphragm and everywhere on the walls of the abdomen, descending even into the pelvis.

This appears to be the nature of the present case, a chronic enlargement of the spleen originating in a miasmatic fever, and slowly and surely enlarging and undermining the health. In some cases of this kind the inflammation which always accompanies enlargement terminates in ulceration. This is a rare event. Dr. Gross has seen one such case, and but one in his entire experience. There is another circumstance in reference to the diagnosis of this tumor, and that is its outline and its situation. It lies on the left side where the spleen is situated, and the tumor has a sharp outline, and a well-defined margin, much more so than an enlarged liver would have. In the female such a case might be mistaken for an enlargement of the ovary. It might be mistaken for an enlargement of the omentum, which is liable to canceroma and hypertrophy, sometimes forming an enormous tumor; but then this lies in front of the bowels nearly equally on both sides. It is liable to irritate the peritoneum and produce ascites, as will all tumors of the abdomen or pelvis. Another effect is pressure on the diaphragm, producing difficulty of respiration. There is also some pain from pressure on the surrounding parts. The patient lies on the right side.

Treatment.—The patient will be given four times a day 15 grains of the hydrochlorate of ammonia in solution. If there is pain at night, an anodyne should be administered. He should take a concentrated nourishing diet, with milk punch; and locally employ one part of biniodide of mercury to eight parts of simple cerate. This is a most powerful stimulant to the absorbent vessels.

Extirpation of the spleen has been occasionally resorted to from the sixteenth century even to the present time; but the operation has usually proved fatal. Portions of the organ extruding from wounds of the parietes have been occasionally excised; and as in the case of Powell of Covington, Ky., the patient has recovered, showing a tolerance of interference by this organ. The removal of the spleen in some of the lower animals is known to have rendered them fat and indolent.

Case II.—*Nov.* 21, 1866.—*Enlarged Spleen.*—Elijah A——r, æt. 34, a laboring man, accustomed to heavy lifting. Has had an enlarged abdomen for two years. On two occasions he has been tapped, but at neither time was there any escape of fluid to any considerable extent, about two ounces escaping at the moment of puncture, followed by gradual drainage to the amount of three gallons. There is a good deal of tumefaction of the abdomen, but not to as great an extent as before the last tapping. The increase in circumference during the past six months has not exceeded four inches. On the left side of the tumor, at the bottom, there is some pain, but no pain in the tumor itself; no pain on taking a long inspiration; in walking, pain is produced by the jarring of the mass; the facility of breathing is much embarrassed; at present the patient can lie down pretty low, but a year ago he had to be kept propped in the semi-erect position; the bowels are costive at present, but sometimes they are regular; appetite is strong; sleep is not good, though there is no pain at night, except that complained of on the left side; patient lies equally well on the back or on either side; passes about three pints of urine in the twenty-four hours, and this urine deposits a brick-colored sediment; and once or twice since being tapped he has passed over a gallon of urine; emaciation has been increasing progressively. There is no discoloration of the skin over the tumor, no enlargement of the subcutaneous veins.

The tumor is hard, extending from the ribs down as far as the pubic bone; it reaches far back into the left iliac region; there is a distinct line of demarcation on the right of the umbilicus, with a rather sharp margin well defined. There is resonance on percussion, showing that the intestine is there distended with air; higher up percussion is dull, on the left side it is flat; the resonance forms a line across of about four and a half inches.

This patient states that he has never had intermittent fever; and that the disease came on without any assignable cause.

It is a case of enlarged spleen. The tumor occupies the situation in which the enlarged spleen is usually found, the left side; the surface is smooth and perfectly uniform, there is nothing nodulated about it; it has a peculiar sharpness of border, and its edge is felt nearly at the middle line. It is probably firmly adherent to the parietal portion of the peritoneum. It is not likely that it is an affection of the omentum, which occasionally becomes the seat of disease, morbid formations being liable to form in it, especially colloid, a form of malignant disease of which Prof. Gross has seen but two examples in this particular situation; one occurring, during his residence in Cincinnati, in a man who, four years before, had had a severe attack of cholera, and the other in a wholesale druggist, of Louisville, Ky., both of which were fatal, and the tumors were found to be enormous, extending from the pelvic region as high as the diaphragm, involving the bowels and portions of the liver. The omentum is also liable to take on hypertrophy, a sort of sarcomatous, fleshy, or fibroid enlargement of its substance, in consequence of which it would form a tumor of considerable bulk, but hardly as large as that attained in the tumor under consideration.

With regard to the tumor on the right side, a portion of it is soft and is ascitic, depending upon an accumulation of serum in the peritoneal sac. The patient's medical attendant informs us that he tapped the man, and three gallons of fluid escaped eight days after the operation. Any tumor of this kind fretting the peritoneal surface, will provoke a secretion and produce ascites. There is another portion of the swelling which is solid, where there is no gas, no resonance, no distinct fluctuation. This is possibly an enlargement of the liver, but it may be something else; it is not quite as solid as an enlarged or hypertrophied liver should be. There may be a cyst in the liver, or a cyst over the liver.

This patient has been treated with preparations of iodine. If the diagnosis is correct, the ointment of the biniodide of mercury — one part to eight or ten of simple cerate—by inunction might do some good. The ointment of the shops is too severe for this purpose, it acts as a powerful irritant. During the progress of treatment it is probable that the ointment may be increased in strength, but it is best to begin with it as weak as possible, so as not to excite too much irritation of the skin. It should be rubbed on effectually, once in the twenty-four hours, keeping the surface covered in the mean time with flannel and oiled silk over it, so as to protect the clothing.

Internally we will use the hydrochlorate of ammonia in doses of 10 grains at first, gradually increased to 12, 15, or 20 grs., three times daily, in solution; combining with each dose one-twelfth gr. of the bichloride of mercury. The treatment is sorbefacient, to try and reduce the size of the spleen.

The diet is to be simple, nutritious, and generous.

Absorption of Gases.—Charcoal from the shell of the cocoanut is said to possess extraordinary power of absorbing gases.

Progress of Medical Science.

THE ORIGIN OF PROGRESSIVE MUSCULAR ATROPHY.—Dr. L. Duménil, Surgeon-in-Chief of the Hotel Dieu, at Rouen, reports two cases, the subject of the most careful clinical observation, cadaveric and microscopic examinations. He shows this disease to be due not to atrophy primitively occurring in the muscular fibres, but on the contrary originating in atrophy of the nerve tubes of the trunks and branches supplying the muscles with nerve stimulus. It seems that Schneewogt was the first to signalize this pathological condition of the nerve tubes in progressive muscular atrophy, and that afterwards M. Jaccoud, in 1864, reported two cases.—*Gazette Hebdomadaire.*

HUGE RENAL CYST MISTAKEN FOR CYST OF THE OVARY.—M. Béhier recently presented to the Paris Academy of Medicine an interesting post-mortem specimen of a huge renal cyst, which during life was thought to be an ovarian cyst. The tumor had been tapped twice, and had furnished each time a chocolate-colored liquid, which never presented any of the characteristics of urine. The obstruction of the orifice of the ureter by two large calculi, appeared to be the cause of this cystic tumor. M Béhier called attention to the importance of the diagnosis in this case, and remarked that the possibility of such a mistake should not be forgotten in the operation for ovariotomy.—*Gazette Hebdomadaire.*

RHEUMATISM AND HEART AFFECTIONS.—M. Vernay, in a communication recently addressed to the Academy of Medicine of Lyons, establishes fully by observation, based upon several hundred cases of acute articular rheumatism, the coincidence first pointed out by Bouillaud, of this disease with endocarditis and endopericarditis. He found the coincidence of endocarditis to be the rule, and non-coincidence the exception. He expresses an opinion, however, differing slightly from that of Bouillaud; and which is, that not only the intensity of the rheumatic affection constitutes the danger of endocardiac complication, but that it is also especially indicated by the shifting character of the articular pains.—*Union Médicale de la Gironde.*

ENDOCARDIAL ULCERATION OF SUPPOSED SYPHILITIC ORIGIN.—M. Villard presented to the Academy of Medicine of Marseilles a heart in which one of the aortic valves offered a peculiar ulceration; there were also some small fungous growths on this valve: the two others were by ulcerations, the borders of which were covered with perforated fibrinous excrescences, and the centre of the ulcerations was of a grayish color. Their peculiar color, and the co-existence of eruptions of secondary syphilis on the skin, induced the opinion that this endocardial lesion was of a syphilitic nature.—*Bulletin de la Société de Med., Marseilles, Jan.* 1867, *and extracted from the Union Med. de la Gironde.*

FATTY "EMBOULIE."—It seems that the first cases of papillary distension by liquid fat, and which were especially observed in the lungs, were noticed about four years ago by Zenker and Wagner, and they both attributed this capillary obstruction to an "emboulie" of fat globules. This condition was supposed and asserted by Grohe to be only an agglomeration of fat and blood corpuscles, due to the diminished rapidity of the circulating current immediately preceding death.

Busch, of Königsberg, Prussia, desirous to throw light upon this subject, carefully studied the conditions which favor the phenomenon of fatty "emboulie," in order to determine if this was caused by the crushing of bone containing considerable marrow, as a few cases already observed seemed to show. By experiments on rabbits, in which he crushed the bones of their hind legs, he incontestably proved this fatty embolia to be due to the disorganization of the marrow, and the absorption of its fat globules by the circulatory system. This peculiar accumulation of fat globules has in certain rare cases been observed consecutively in diseases not connected with the bones, as in endometritis and metrophlebitis; but especially in suppuration of tissues containing much fat. Fatty embolia generally does not sensibly affect the health, and appears to be of more interest physiologically than pathologically. The cases in which it appears to have been the only cause of death, and sometimes of sudden death, are exceedingly rare.

DEATH FROM THE ENTRANCE OF AIR INTO THE VEINS OF THE UTERUS.—Professor Olshausen relates a case in which, during parturition, the cervix not dilating rapidly enough, the uterine douche was applied. It was used three times, and about eight minutes after the last application, the patient complained of difficulty of breathing, suddenly rose straight up in bed, and then fell, and after a few convulsive efforts died. Emphysematous crepitation could be produced by pressure on the abdomen. At the post-mortem examination a considerable quantity of air bubbles was found in the coronary veins of the heart. The small quantity of blood contained in the right heart was very frothy. The womb crepitated on pressure; the surrounding vessels were filled with air bubbles, as also the ascending vena cava. The two placentas (it was a case of twins) were detached, and one of them formed with the interior wall of the uterus an inflated pouch.

REMARKABLE CASE OF DEPOSIT IN THE LUNG.—Zenker reports that a woman, whose occupation in a factory exposed her to the inhalation of minute particles of oxide of iron, died a few weeks after exhibiting some of the general symptoms of pulmonary consumption, but with negative results on auscultation and percussion. At the sectio cadaveris the lungs were observed to be infiltrated with the red oxide of iron, which was found to be about two-thirds of an ounce, and of the same nature as that daily used by her in her work, and which was deposited in the tissue of the lungs in the same manner that charcoal dust is seen after death in the lungs of miners and others, who constantly live in an atmosphere of coal-dust. Possibly the Pittsburg doctors have ampler facilities for the study of coal dust and other deposits in the lungs than Zenker, and might elucidate this murky subject.

EXPERIMENTS WITH BROMIDE OF POTASSIUM.—Messrs. Eulenburg and Gutmann have stated, before the Academy of Medicine of Paris, that doses of from thirty to sixty grains, either by the stomach or injected under the skin, kill a rabbit in from ten to forty minutes. Smaller doses momentarily disturb the action of the heart and paralyse the power of moving and feeling, causing a few antecedent shivers. On a post-mortem examination of the animals, no change but some congestion of internal organs is found. With frogs, a subcutaneous injection of one grain to two causes, after ten or fifteen minutes, loss of movement, reflex action, and feeling, with arrest of respiration, weakening and infrequency of cardiac ventricular action, retardation of peripheral circulation, and lastly, complete diastolic arrest of the heart's action. These effects are attributed by Messrs. Eulenburg and Gutmann not to the bromine, but to the potassium.—*Lancet.*

A NEW KIND OF ACARUS.—M. Indée has noticed among the Kabyles of Northern Africa a pruriginous

complaint somewhat like itch; where, however, the acarus, forming a black spot on the skin, moving about with energy, is different from the well-known acarus scabiei. The sulphuro-alkaline ointment destroyed the animalcule. In France, M. Rouyer has noticed in the department of Indre, a papular pruriginous eruption, affecting the country people who had handled the wheat somewhat spoiled by the frequent rains of last summer. The same parasites were here observed.—*Lancet.*

Decapitation.—As is usually the case after every execution in Paris, the decapitation of the brutal murderer, Lemaire, has been followed by statements in the newspapers as to the persistence of sensibility for some time in the head after decollation. M. Bonnafont has, therefore, thought it worth while to give an account, in a recent number of the *Union Medicale*, of some experiments he made many years ago in Algeria in order to dissipate the belief then so generally held in that colony. On the occasion of the decapitation of two Arabs, he had ready a vessel nearly filled with pulverized plaster, and placed on a low table, and a friend and himself were provided with a small speaking-trumpet and a very sharp-pointed probe. Immediately the first head was cut off it was placed in the vessel containing the plaster, in order to arrest as far as possible the hæmorrhage. The speaking-trumpet was applied to the ear of the defunct, and his name well shouted through it, but no movement of the eyes or of any part of the face manifested the slightest perception. The eyes remained dull and motionless, and the face colorless, and scarcely any contraction of the muscles was induced by provoking them with the pointed probe. The second head manifested in like manner signs of instant death; as, indeed, how could it be otherwise than that this must at once ensue upon the syncope induced by the section of the large arteries? The numerous relations to the contrary, as well as the blush on Charlotte Corday's cheek, M. Bonnafont regards as fabulous, and he points out that there is no analogy between this reputed retention of sensibility by the decapitated head, and the fact of ducks and turkeys being able to walk about for some time after decapitation, as shown in the experiments of Aldini and Eugene Sue.—*Quar. Jour. of Psychological Med.*

Effects of Medicines Introduced into the Urethra.—Professor J. L. Crawcour, of New Orleans, has communicated to the *Southern Journal of Medical Sciences* some exceedingly interesting, and it may prove equally important experiments with regard to the constitutional effects of substances introduced into the urethra. He concludes that the portion of this canal bounded by the prostate and neck of the bladder has a remarkable power of absorption, which is not possessed by the walls of the bladder within, nor by the membranous or spongy portions without, this being due to the rich nervous and vascular supply of the part in question. The communication is based upon observation of nearly sixty cases, in all of which a cerate of morphia or atropia was smeared in very small quantity upon the extremity of a silver sound, and allowed to remain in contact with the parts from one to five minutes.

In one case less than half a grain of atropine cerate, ten grains to the drachm, produced complete dilatation of the pupil in three minutes, and active delirium in five minutes. The subject was a hospital patient not suffering from urethral disease. In another case, a portion no larger than a pin-head produced dilatation of the pupil and huskiness of voice in five minutes, and a staggering gait in ten minutes. The effect of small amounts of morphine ointment, one scruple to the drachm, was no less marked.

In one case drowsiness was produced in five minutes, and eighteen hours afterwards the patient returned to be catheterized, paralysis of the bladder having occurred.

The professor does not hazard a theory, the effects obtained appearing entirely out of proportion to the amount of medicine used. He therefore merely submits the facts to the medical public, hoping that in cases of mania and delirium tremens they may be of service, and looking to the future for an explanation.

Aneurism in the Horse.—M. Raymond has published two cases which refer to old horses. The mesenteric trunk was in both instances the seat of the aneurism; and the author observes that very few old horses are dissected which do not present dilatations of the trunk just named. The clot often contains hard substances and parasites.—*Lancet.*

Case of Post-Partum Hæmorrhage, in which the Ether-Spray was Successfully Used.—John Broadbent, M.R.C.S., etc., Manchester, reports (*British Med. Jour.*) a case of post-partum hæmorrhage successfully treated by ether-spray. At 10½ P.M., on April 3d, 1867, he was called to see Mrs. T., in labor of her twelfth child. He found the os uteri only slightly dilated, and the pains weak. The breech presented, and the child was born the following morning, without anything unusual occurring. The placenta was adherent, and required the introduction of the hand for its removal. Profuse hæmorrhage followed; and, though the usual remedies, including ergot, cold napkins to the vulva, etc., and introduction of the hands into the uterus, were employed, the bleeding continued, and the woman became almost pulseless, and was evidently sinking fast. The hands in the uterus moved about as if in a wet bladder, little or no contraction being excited by it. His friend Mr. Harrison saw the case with him, and he proposed to him to apply the ether-spray to the hypogastric region. This he did, using the double jet; and very soon the uterus began to contract and the hæmorrhage ceased. There was no relaxation of the uterus after; and the woman ultimately made a good recovery, though very anæmic for some time after. The hæmorrhage was evidently due to uterine inertia; and the effect of the ether-spray in producing contraction of the organ was very marked after the failure of the remedies used before it.

Nodulated Arteritis.—MM. Kussmaul and Maïer describe a new variety of arterial disease, characterized by circumscribed thickenings of the walls of vessels, commencing with an abundant proliferation of the cells of the middle coat. This *nodulated arteritis* and the muscular paralysis which accompanies it are altogether incurable. Its phenomena are the following:—1. A general paralysis occurs without known cause, and is developed rapidly, with fever, nephritis, and violent muscular pains. 2. This is accompanied by a nodulated peri-arteritis, which, by interrupting the circulation, causes alternate contractions and dilatations of the vessels. 3. The principal diagnostic signs are the rapid development of muscular palsy with loss of contractility and intense pain, the nephritis, the arteritis, and the presence of small arterial nodosities under the skin. 4. When the disease affects the intestinal arteries extensively, it may cause the same changes in the mucous membrane as are produced by embolism. 5. The muscles undergo fatty degeneration, but as long as they have only partly lost contractility they may recover. 6. In order to restore contractility the application of induced, and still better, of constant, currents is desirable.—*Lancet.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, August 15, 1867.

THE SCARCITY OF WORKING MEDICAL MEN IN AMERICA.

IT is a deplorable fact, that we have very few actual working men in our country. The desire for large practice has taken such a possession of us that we have lost sight of everything else, and like a dangerously fascinating whirlpool it has swallowed up in comparative oblivion some of the best minds in the profession. A distinguished medical writer has truthfully said, that a large metropolitan practice is the bane of professional progress. To a certain extent, the allurements held out by a large business are such as none can altogether withstand; the possession of a handsome brown stone front, a splendid driving establishment, and a richly furnished office, with the attendant luxuries that associate themselves with a handsome living, are temptations which Americans especially cannot be proof against, and we are fast beginning to think that such is after all the main object to be attained. It is true we occasionally deplore the existence of so few scientific observers in our midst, but our consciences very rarely do more than temporarily upbraid us for our lack of enthusiasm in the prosecution of our studies, and we soon settle down into an apathy which is both enervating and dangerous.

In other countries this is not so. There are greater numbers to be found in Europe, especially, who are constantly laboring in the cause of science, patient observers, careful thinkers, and sound students, who are only content when they are enabled to add some new fact, or make some new discovery, which may not only benefit their race, but their profession. We are often led to envy such, but we very seldom go further.

As an evidence of the want of interest in scientific pursuits, we have but to refer to the paucity of communications of those of our representative men to the columns of the medical journals, and the small number of works that are issued by the American press. There is some good reason for this in a want of something to say, and in an absence of an originality of thought and observation which is always associated with a lack of study and reflection; but even those who are the exceptions to the rule, who really labor for the advancement of their calling, stop just short of doing the most good by the publication of their views to their brethren. With a few notable exceptions, no standard works have been issued within the past few years, comparable with the amount of talent which might be developed by patient industry on the part of its possessors. The standard medical literature of our country is so deplorably deficient that we are still hanging to the skirts of transatlantic authors, and refusing to help ourselves with the abundance from our own storehouses, and develop a home literature that would be a credit to the profession of the Western Hemisphere. Our book authorities can be numbered by a dozen or two, and this in a country peculiarly blessed with the means of most extended observation.

When a fresh graduate first embarks in business he seems fully imbued with the idea that a life of study and hard work is before him, and with the best of intentions resolutely sets himself at it. But how soon does he forget his duty! His microscope is liable to become dirty and neglected, his books quietly rest upon his shelves, and every other interest is lost, save that which centres itself upon a large and lucrative practice. If half the work were devoted to study which is now bestowed upon the hatching of a good bank account, how much better off would be our profession, and of how much more service we might be to humanity! The main trouble is, that we are not content with a livelihood, but must aim for fortunes, and really degrade our profession to the merest trade. A physician's actual worth is not now measured so much by his skill as the extent of his business, and bewildered with the hope for a like success, too many are greedily following in his footsteps.

We contend that no amount of business should deter any medical man from continuing his studies, and with the really industrious man it does not. We know of a few, who, although in extensive business, can always find time and opportunity to unravel the mysteries connected with a post-mortem examination, and even search up the literature of any particular subject connected with a case under investigation; and of others, unluckily greatly in the minority, who devote the early morning hours to reading and research, who never neglect to record their cases as they occur, and who take every pains to inform themselves of what is going on around them, and who are in reality the thinking, progressive, and original men in our ranks. It is not expected that every one will be an originator; but if he cannot lend a helping hand himself in developing the resources of our art, it is his bounden duty to keep himself at least informed of the doings of others, and take every advantage which experience and observation can give. But so seldom is this done that the performance of such a duty is an exception to the rule. We have known physicians who have allowed books upon subjects which should materially inter-

est them, to remain for months upon their tables without the leaves being cut, and journals to lie piled in the corners of their rooms not even divested of their wrappers. This, we will admit, is an extreme case, but a great majority of our practising physicians do not do much more.

In times gone by the actual making of money was considered as secondary to the study of disease and its phenomena; there was that ardent desire for advancement and discovery, which centred itself in the renowned John Hunter, who, when disturbed in the midst of his experiments by a patient, only reluctantly left his subject, because he thought his family might have a use for the guinea on the morrow. There are too few who practise on such a principle, too few who would develop such a relish for improvement as would enable them thus profitably to fill in their spare hours.

It is shameful, too, to notice what a small amount of work is done in our large societies. We might instance that of the American Medical Association as a striking example. Year after year committees specially appointed to report on different subjects fail to make any reply; and the majority of their members, although appointed with reference to their qualifications for the task, do not care even to offer a reasonable excuse for the non-performance of a duty. Then again the comparatively small number of competitors for the prizes is another indication of the growing indisposition to do anything more than the mere attendance upon their patients involves.

We are not led to make these remarks in the hope that we can offer any particular remedy for the evil, but merely to allude to its existence as an explanation for the paucity of standard works among us, the small number of illustrious names, the almost total absence of original observations compared with what has been done, and is being done elsewhere.

The recent discussion concerning the status of female physicians which took place before a meeting of the Philadelphia County Medical Society, and was published in our columns, has given our readers an idea of the estimation in which these doctresses are held by our neighbors. Shortly after the report of the same meeting appeared in the *Philadelphia Reporter*, that journal was favored with a communication from a correspondent signing herself Ann Preston, M.D., in which she took occasion to defend the position of female doctors in a manner more vehement than logical. In the same journal appears an answer to the aforesaid letter, in the shape of a communication from J. W. Sherry, of Brooklyn, N. Y., which is so much to the point that we cannot forbear placing the bulk of it before our readers. The principal part of the letter is made up of a series of questions propounded to the fair defender of women's rights in medicine. Here are some of them:

When *consultation* is granted, are women to be admitted to all professional meetings: such as medical societies, medical conventions, medical quizzes, etc., etc., just as far as their "mental cravings" may prompt them to ask?

Does the authoress approve of *women* and *men* studying anatomy over the same dead subject—dissecting in *company* the male or female cadaver?

Does this lady approve of young women walking the hospitals with young men, the medical, and more especially the *surgical* wards?

Does she declare that it is proper and becoming for young women to witness any or all operations in the amphitheatres of hospitals, crowded with men "from pit to dome?"

Does she claim that *surgery* is a legitimate field of study for women?

If so, would she perform an operation for phymosis, fistula in ano, or calculus; or use the catheter on the male patient? Should *any* woman do these? Women *can* be found who can perform such operations. Should they? "To this complexion must we come at last?"

Some twenty ladies presented themselves at a surgical clinic and lecture in one of the New York Hospitals. The surgeon announced that the subject would be *hernia;* and, not wishing to shock the delicacy of the fair auditors, he suggested the propriety of their withdrawal. Several hundred young men were present, and he thought it unfitting that the young ladies should remain. *They did not retire*, but occupied the *nearest seat*, while eighteen *male* patients were exhibited, necessarily *in a state of* NUDITY.

Does ANN PRESTON, M.D., endorse the course of the young *ladies?*

At another hospital, lithotomy was to be performed on a man. Eight members of "the little band of true-hearted women, just entering the medical profession," appeared to witness it. The surgeon, from motives of delicacy, asked them to retire, and he sat down to await the result. But they moved not. He thereupon announced that if they did not withdraw, the operation would be postponed, or done privately. *Then*, they left. Does ANN PRESTON, M.D., insist they should have remained, and that the surgeon should have surmounted his modesty, and have proceeded with the *exhibition* without a protest?

When women have fully attained their so-called "*right*" to practise medicine on an equal footing with men, does ANN PRESTON, M.D., assume that they shall treat any and all diseases that "our flesh is heir to?" Shall they, in the male, treat gonorrhœa, syphilis, stricture, enlarged prostate, and spermatorrhœa?

Shall women handle the genitals of men, apply escharotics to chancres, introduce the urethroscope, examine with digit *in ano* the prostate to find out its condition, etc., etc., *ad infinitum*, *disgustam*, *nauseam?* Is it to such a field that lady practitioners claim a right? And if so, *is* it strange that the medical profession so generally oppose this "great movement," this "evidence of the advancing civilization of the day," this "revolution that is never to go backwards?"

Though the writer may feel that she and her "little band of true-hearted women" are called to do this work, though she may "appeal to heaven to witness the justice of her cause," though she may say that she "will settle the question with her God;" yet there are men and women, the best and purest, the most thoughtful and liberal, who cannot agree with her. Great names and good ones may lend their influence to this "movement," and it may be claimed that the moral sense of the community sustains it, "but there are those who fail to recognise the appropriateness of

women entering an arena containing so many repulsive features, "so many forbidding conditions."

Reviews.

I. CHOLERA, as it appeared in Nashville (Tenn.), in 1849, 1850, 1854, and 1866. By WM. K. BOWLING, M.D., 1866. 8vo., pp. 27.

II. REPORT TO THE INTERNATIONAL SANITARY CONFERENCE of a Commission from that Body, on the Origin, Endemicity, Transmissibility, and Propagation of Asiatic Cholera. Translated by SAMUEL L. ABBOT, M.D. 8vo., pp. 104. Boston, 1867.

III. CIRCULAR, No. V., WAR DEPARTMENT, SURGEON-GENERAL'S OFFICE, MAY 4TH, 1867. REPORT ON EPIDEMIC CHOLERA. 4to., pp. 65.

IV. REPORT OF CITY PHYSICIAN FOR THE YEAR ENDING APRIL 1, 1867. Boston, 1867. 8vo., pp. 152.

I. WORKS on cholera still continue to make their appearance. There is little doubt that the disease will reappear the present summer in many of its old haunts; and indeed, while we write, we hear of its fatal prevalence at Fort Harker, Kansas, among the United States soldiers, as well as among civilians in the neighboring villages, also in many other parts of the country. If we are not mistaken, it is destined to take a wider sweep the present season than the last. But it is consolatory to know that we are far better prepared to meet it, and successfully resist its progress. The pamphlet of Professor Bowling, of Nashville, contains some interesting facts, combined with some speculations; but we look in vain for any very accurate statistics in regard to the disease in any of the years mentioned. We are told that "from the 9th of June until the 1st of August, 1850, it is probable 500 persons perished in Nashville and its suburbs from cholera;" also, that "there could not have been less than 5000 cases, in a population of about 20,000, of which 500 proved fatal." No very reliable record, however, seems to have been kept, nor any minute and accurate observations made; not a single *post-mortem* is recorded. We cannot speak highly either of the treatment which is pronounced to have been the most successful, viz. "4 grs. opium, to five of calomel," *after each liquid evacuation.*" This treatment is declared to have succeeded, "except among fruit and vegetable eaters, where it produced "little or no effect." *Ice* eaten *ad libitum*, is stated to have best succeeded "in allaying thirst, gastric distress, and vomiting." In 1854, in May, June, and July, to the 11th inclusive, it is stated, there were 88 cases of interments from deaths of cholera in south Nashville and suburbs, including a population of about 30,000, "a large majority being among negroes and children." The drinking *water* was from wells, and contained much lime. In other parts of the city hydrant water was chiefly used. The generalizations of Prof. B. would seem to be rather surmises, or hypotheses, than conclusions legitimately drawn from well established facts. For example, in the way of food, he would forbid, "*every description of fruit, non-cereal vegetables, and animal products, as milk and eggs.*" *Bread* is allowed: also, good beef, mutton, chicken, ham, bacon, crackers, dry-toast, biscuit, plain corn-bread, tea and coffee. If persons living on such a diet, are attacked with cholera, "the system responds instantly to medicine," while it is said, the contrary is the case with the vegetable-eater. Crude, green, and stale vegetables are, no doubt, unhealthy food in places where cholera prevails, and so are fresh ripe fruits and vegetables, taken in excess; but there is no proof on record that goes to show that either of the latter taken in moderation will either excite an attack of cholera or necessarily insure a fatal result. In 1866, there seem to have been, as in former years, no very accurate records of cases of deaths from cholera, though Prof. B. estimates the latter at 1000 souls. "The cholera was twice as fatal here as in the great visitation of 1850." The daily number of deaths reached as high as 70. It is to be hoped, since the able Prof. Joseph Jones, M.D., is Health Officer of Nashville, we shall have correct mortuary tables of that city—as well as some other much needed municipal reforms. As 3000 dollars were expended for coffins for "cholera paupers," it is evident the mortality among that class must have been great. Two and a half per cent, only, of the population are stated to have died of the malady; no excessive mortality certainly. The large mortality on Blackwell's Island, 123 out of 800, is attributed by Dr. B. to the "free use of vegetables in a cholera atmosphere." "It is our deliberate opinion," says Prof. Bowling, "that if this rule is religiously observed" (abstinence from vegetables), "cholera, if it occur, is so shorn of its malignity, as to make it incapable of destroying life in the absence of doctors."

In 1833, 174 died of cholera in Nashville (so stated); in 1835, 66; in 1849, 311; in 1850, 316; in 1854, 88; in 1866, 800. "The Board of Health," it is said, "did all they could to bring fully before the people, the facts of the entire case!" But something more, we think, is necessary; not a word about the use of disinfectants, cleansing of streets, houses, lanes, alleys, etc.; only "hydrant water was given to any amount," and "medicines furnished gratis by certain first-class apothecaries!" The pamphlet closes with a very valuable letter from Prof. Jones from N. Y., giving the results of the experience of the "Metropolitan Board of Health" of N. Y., in regard to the use of disinfectants in checking the progress of the malady, and also as to the treatment.

II. The Report of the International Sanitary Conference which met at Constantinople in May, 1866, is already widely known to our readers, through abstracts already made in our pages. It has generally been acknowledged to be the most important and authoritative document on Asiatic cholera that has ever been published, and as such is worthy of the careful consideration of all municipal governments and members of the medical profession. It takes the most decided ground in favor of the doctrine of the communicability of cholera, of its progress from place to place solely by human agency, of the importance of restrictive measures to check free communication during cholera epidemics with infected districts, and of controlling the disease in its natural home. It is true, that many, who had closely studied the last irruption of Asiatic cholera into Europe from the East, and noticed how closely it followed the course of travel from that quarter, how its introduction into different places, before unaffected, was distinctly traceable to infection, by the importation of cholera patients, had become fully impressed with a belief of its infectious character, long before it made its appearance on board immigrant vessels in the port of New York in the fall of 1865. Hence the Metropolitan Board of New York, with wise and intelligent foresight, adopted measures to exclude the disease from the city by a rigid system of Quarantine, which, though successful for more than six months—during which the disease was confined to vessels in the lower bay—yet eventually proved of no avail, owing to the want of suitable places for detention and classification of emigrant passengers on land, and,

also, a relaxation of measures as regarded the introduction of persons into the city laboring under choleraic diarrhœa, through whom, there can be little doubt, the disease was propagated to places where it subsequently appeared. This most important fact has now been fully demonstrated; for the malady has been traced step by step, wherever it has appeared, and in every instance, it has been proved to have been conveyed through human intercourse. This was indeed sufficiently evident from facts in the history of former epidemics of cholera; but the old, obsolete, unphilosophical doctrines of *atmospheric contamination and epidemic constitution of the air* had taken such complete possession of the minds of the profession, that it was next to impossible to eradicate them. Even our teachers of medicine were so enslaved by these old hypotheses, that they were unwilling to admit the most obvious facts when placed before them. Their minds seemed not only befogged, but they clung to their delusions with a tenacity which nothing could weaken or destroy; and even now, instead of candidly admitting they were mistaken, and retracting what they had put forth on the subject, they continue to reiterate their exploded doctrines, though the whole medical world has rejected them.

Our limits will not permit any extended notice of this pamphlet of 108 pages, and we must, therefore, refer the reader to it as the most valuable document which has ever appeared on the subject. There is one question, however, discussed, which is so important as bearing on the question of quarantine, that it deserves special notice. It is this: "Are there conclusive facts which force us to admit that cholera can propagate itself to a distance by certain states of the atmosphere, by winds, or by any other similar change or modification of the surrounding mediums?"

As it has been abundantly demonstrated that epidemic cholera has never been developed spontaneously outside of India, it is unnecessary to discuss the question whether certain states of the soil, or certain hygienic conditions, can give rise to the disease (though they may favor its epidemic prevalence). The most important question connected with it is, whether it can be transported to a distance by a contaminated atmosphere; in other words, whether the cholera *virus* can be carried to a distance by winds, and thus be propagated? If so, then, quarantine restrictions must necessarily be of very questionable efficacy. The following quotation from the Report of the Convention shows their opinion regarding this point: "To prove that cholera may be propagated by the atmosphere beyond a certain distance, we need at least one conclusive fact; that is to say, one which establishes *the passage of the disease from an infected place to a healthy one without any possible previous communication.* Now this fact does not exist in science; and the Commission has been able to satisfy itself of the frivolousness of all the assertions which have been made of this kind." Again, "Undoubtedly, it has not always been possible to demonstrate the previous communication between an infected place and one subsequently infected; but wherever the inquiry has been made with care, and where the conditions of the locality admitted of a verification, this previous communication has been established." Again, "It is a law, up to the present time without exception, that cholera has never advanced more rapidly than man in his migrations."—(*p.* 40.)

There is another very important point, as the Commission state. An arrival of cholera at a port is a complex affair, comprehending man and all that directly belongs to him: his baggage, his effects, his merchandise, his animals, the ship which brings him, in fact everything which accompanies him; and, as cholera is transmissible by such means, a long voyage without any outbreak of the disease, or any appreciable symptoms, is no security against danger. *The present rule, therefore, that if emigrant vessels coming from places where cholera prevails, have had no cholera cases on board since they left an infected port, they are, therefore, to be regarded as safe, and the passengers with their effects landed, and go where they please, is an unsafe rule, and should be changed.* On the contrary, according to the Commission, the rule should be, to consider every such arrival as suspected, and place both ship and passengers under proper restrictions. We call the attention of Health officers particularly to this point.

In connexion with this pamphlet, it may be well to call attention to the conclusions of the "Cholera Conference" that recently met at the City of Weimar, in Germany, composed of the most distinguished sanitarians of Europe; we present this in the form of a synopsis, drawn up by the Registrar of the "Metropolitan Board of Health," Dr. Harris, as containing the latest and most authentic conclusions on the subject:

"*To the President Metropolitan Board of Health.*

"Dear Sir—Having been favored with an abstract of the discussions and concluding recommendations of the Cholera Conference that recently met at the city of Weimar, and having learned from Prof. Pettenkofer that the full stenographic report of the Conference will be published at Leipzic during the summer, I now lay before the Board of Health a synopsis of the discussions, and their conclusions as given in this abstract.

"You will recollect the polite invitation that was extended to New York to be represented at that important meeting. It turned out to be precisely such a Conference as the interests of public hygiene required, for the most practical and comprehensive questions were discussed by the leading sanitary scholars of Europe, nearly sixty delegates being present. The following conclusions were adopted, and I beg leave to present them here before giving the synopsis of the debates of the Conference.

"CONCLUSIONS AND RECOMMENDATIONS.

"I. The Conference expresses as its deliberate conviction that the efforts to arrest and prevent cholera by disinfectants should be continued in the most energetic manner.

"II. Disinfection will be entirely successful only where excremental matters are carefully gathered and kept from being cast about; when attention is given to cleanliness, and the means of health; and when the disinfection is performed by sanitary authorities in a compulsory manner.

"III. In places where the entire locality or district cannot be at once disinfected, it is advisable to disinfect throughout the places visited by the previous epidemics of cholera.

"IV. The general disinfection should be performed at the proper time, that is, before the epidemic is actually prevalent in town or place. Every house or spot that becomes infected, or is suspected to be so, must be kept constantly under the influence of disinfection.

"V. In regard to the best substances as disinfectants, though the testing of various articles is not yet completed, there have been found, to the present time, no more effectual substances than sulphate of iron (copperas) and the carbolic acid; and, as experience proves, we have no other disinfectants that can be employed with greater facility. A combination of both these disinfectants is therefore recommended.

"VI. The disinfection of clothing that has become

infected by cholera excrement is especially an important matter. For that purpose the Conference recommends that all such clothing be disinfected by boiling in water, or by chemical treatment in a proper solution of "zinc vitriol" (sulphate of chloride of zinc); and the Conference also recommends that special arrangements be made by which disinfection can be employed in all places, and at any hour, among or for the poor.

"VII. For the disinfection of sewers and drains, the Conference advises the trial of Mr. Sauvren's method. (The means used by Mr. Sauvren are not yet fully published, but they are believed to be similar to McDougall's—namely, a combination of carbolic or coal tar preparations, in a cheap form.)

"VIII. If cholera infects any house or spot, it is recommended that, if practicable, the house so situated in an infected place, or being infected, should be vacated, and the inhabitants should be removed from the infected spot.

"IX. It is especially recommended that the ground-water (that is, the water in the ground) about dwelling-houses, and all the grounds about habitations of every kind, should be preserved undefiled by any excremental matter of cholera; also, that all drinking water be undefiled and pure, and that where no pure water can be had, the water which must be used should be disinfected by boiling.

"Such were the final conclusions of the Conference in reference to the first duties of sanitary authorities and the people of any town that is threatened by cholera. The discussions were based upon the experience and studies of the distinguished gentlemen who had thus agreed to meet and compare their views, and the results of their observations. The attendants at the Conference were from various cities of Germany, Holland, Prussia, Austria, Hungary, and Russia. The history of cholera outbreaks among the troops in the war last year proved marvellously interesting, and conclusive on many points. Next in order of interest and importance was the history of infection by means of water contaminated by cholera excrement. Closely allied to the latter subject was the examination of evidence concerning the discoveries that have been made in regard to the particular means by which the cholera infection is transported and propagated. Lastly, and most practically useful, was the examination of evidences concerning the proper and best methods of disinfection, and the relations of such means to the control and promotion of cholera epidemics. The chief medical officer to the Privy Council of Great Britain presented the history of the outbreaks of cholera in London in connexion with the water of the East London Water Company, which, as Dr. Radcliffe has shown, was contaminated by cholera excrement. In the district where that water was used the epidemic burst forth as by explosion; while, subsequently, in other places it spread by the more usual methods, and in the more usual manner. Then, again, there were other instances where the epidemic spared all persons in certain asylums and hospitals who used privies that were entirely uncontaminated by cholera excrement, while the epidemic decimated the classes of inmates that used the latter. The Conference conceded that wells and reservoirs of drinking water were frequently contaminated by the cholera poison, by soakage into them of the infectious element from the cholera stools; but Profs. Pettenkofer, Wanderlich, Simon, and others, agreed that drinking water was not the most universally common means of communicating cholera to man. The influence of ground moisture, or more precisely of the ordinary ground-water, while such water or moisture is receding by drying of the ground after a wet period, was proved by such as daily used the same well water, but who used different privies, and frequented different and well separated yards, as we saw the same fact illustrated in two adjacent pavilions on Blackwell's Island last summer. The influence of different kinds of grounds in receiving and propagating the epidemic virus of cholera was examined, and Dr. Pfeiffer, of Vienna, showed the curious course which the epidemic pursued in passing through the great forest country of Thuringen last year; while the delegates from Dresden and some other places showed what conditions of the earth had permitted and favored the spread of cholera on their soil that covered certain granite rock districts. The outbreaks on Blackwell's Island and the rocky summit of Hudson City, fully bear out the conclusions of the Conference on the subject of cholera epidemics on rocky surfaces, and do not disprove the agency of the surface soil in propagating the virus when planted in such places. Examining the great mass of facts presented by the members of the Conference in regard to influence of the ground, and its retentiveness of undrained water, or being porous, and at times saturated and again undergoing a course of drying by evaporation, the more important conclusions seem to be as follows:

"1. That porous soils, and any kind of earth that retains and favors the ordinary kinds of fermenting filth, will readily retain and repropagate the virus of cholera when once the germinal virus has been introduced or planted by persons coming from infected places. That the mere altitude of a place is not the question that determines its susceptibility to cholera; that the moisture (ground-water), and the fluctuations of that moisture in a soil by rising and receding (drying), favors the propagation of cholera; that a sewer or drain may become the chief source of infection to some places where is no soil, or where the ground and everything except the sewers and drains have been disinfected.

"2. That Prof. Pettenkofer's use of the term ground-water should be understood, as he intended, to mean the standard of saturation by moisture in the soil, and that grounds which, upon their surface appear to be high and dry, may, nevertheless, be saturated with moisture; that is, have an excess of ground-water (or high ground-water); and that the sanitary drainage and drying which are necessary to protect a soil against repropagating the planted virus or germs of cholera must be deep and thorough. The history and topography of the cholera fields of Halle, Berlin, Zwickau, Thuringen, Helsingfors, and St. Petersburg, supplied admirable proofs of this great doctrine in sanitary drainage.

"3. Good proofs were adduced that there are some kinds of soil that seem to be natural disinfectants of cholera virus, and upon which an epidemic cannot spread except in filthy houses, sewers, &c. We have not time to make the abstract of the facts that will illustrate the true theory of this kind of exemption. We can say, however, that it is plainly important that regard should be given to the kinds of earth and materials used for filling up sunken lots, and that even the location of dwelling-places may sometimes be wisely a matter of choice as regards the nature of the soil.

"The facts concerning specific disinfection to destroy both the cholera virus and all susceptibility to material for its repropagation in a house or a district were well discussed in the Conference. The negative facts were specially important, for they showed that in a few places, as in the great prison at Halle, the epidemic swept forward regardless of the previous and continued disinfection of the grounds and nuisances with sulphate of iron. But in those instances it was proved that the sewers and drains were not disinfected, and that not

only were the infected spots particularly exposed to, and connected with such drains and sewers, but that the copperas solution had been relied upon without admixture with carbolic acid, and the powerful antiseptic agents which coal-tar contains. In Berlin there was great success in the use of permanganate of soda, with sulphuric acid added—that is, the success was achieved by the most rapid and powerful oxidization, in the same manner as we last summer disinfected the defiled clothing and bedding of the cholera sick by means of permanganate of potassa. The expensiveness of the method is the chief objection to it. Yet, for domestic and limited applications it is a perfect method for clothing and upholstery. The fact that with entire unanimity the Conference recommended that the main reliance for disinfection should be placed on the simpler and powerful agents—sulphate of iron and carbolic acid, which the Metropolitan Board unhesitatingly adopted at the beginning of the epidemic last year—will be ample warrant for our continuing to employ those cheap and effectual substances.

"The vital importance of perfect sanitary care of all persons sick or infected with cholera was illustrated in the history of the epidemic in every city. Disinfection alone, and especially the irregular and unsystematic, or unenforced applications of disinfection, did not always control the prevalence of cholera; indeed, such exclusive and unmethodical sanitary work often resulted in fatal disappointments. In some cities, as in Erfurth, even the carbolic acid was so freely used in some parts of the town in privies, that the wells in the vicinity of the privies flooded with that disinfectant, yielded water that tasted strongly of it; yet parts of Erfurth were neglected, and cholera was fearfully epidemic there. But it was conceded that in cities in which there was perfect, and systematic, and well-regulated sanitary disinfection combined with perfect care of the sick, and of all suspected persons, as was the case in the city of Bristol and some other favorite cholera haunts, the epidemic was controlled, and, by like faithfulness and skill, that it could and should be generally controlled in all civilized cities.

"Prof. Hirsch presented the argument and studies that favor the discovery of the precise nature of the poison that produces cholera, and the Conference commended and urged on the inquiries that have already, in the hands of Prof. Klob and Thome last year, resulted in discovering a minute microscopical growth that seems, thus far, to be exclusively produced in cholera excrements, and which obeys all the tests for the destruction as well as propagation of cholera. The spores of that little growth multiply with marvellous rapidity, and they are not destroyed by ordinary doses of chlorine, or chloride of lime, but are killed by sulphate of iron and carbolic acid.

"The Conference recommend that scientific naturalists, like the men who are now at work on these questions, should continue their researches. It was also recommended that observers of cholera should carefully study the conditions under which the epidemic is transported from place to place, and also study the relations of ground moisture (ground-water), and other local conditions that determine the boundaries of epidemic fields.

"It will be observed by these notes of a discussion that appears to have been conducted with the single object to find out what is known, that there was a clear knowledge of the practical wants of sanitary officers and governments. The nine propositions which the members of the Conference have submitted as their unanimous conclusions and recommendations I have placed at the beginning of this abstract, as being precisely the kind of information which a Board of Health most wishes to receive, and upon which it can base judicious practices. Fortunately for the good name of your Board as for the safety of the city last year, our practice was, from the first, based upon these doctrines, and the great minds that led in the Weimar Conference were the men that had most aided us in former years to deal with epidemic and infectious diseases. I am happy to learn that the Leipzig report is to be fully illustrated by maps and charts to show precisely what course cholera has pursued in European cities. We may hope to receive copies next month. I regret that the abstract forwarded by Prof. Pettenkofer cannot be entirely translated and placed in your hands to-day. These pages contain the gist of the whole, but the debates touched upon a great many other points. We are a little surprised that some conclusion and recommendation on quarantine was not reached. But, since the fact has been demonstrated that persons who travel away from an infected district may themselves, while yet journeying and not sick, spread cholera by means of excremental evacuations, it is not surprising that little reliance should be placed upon quarantine regulations as a means of preventing cholera from spreading in Europe.

"Respectfully yours,
"ELISHA HARRIS, Corresp. Sec. M. B. H."

III.—The circular from the War Department on cholera in the U. S. Army, drawn up by Assistant Surgeon J. J. Woodward, M.D., is a very able document, made up from official reports, with statistical tables exhibiting the monthly number of cases and deaths from cholera, and the allied bowel affections, for each post where the disease prevailed; and although the total number of cases is not very great, yet they bear a large proportion to the number of troops exposed to the disease; and the circumstances attending the transmission of the epidemic from post to post are so interesting, and so clearly demonstrative of the infectious nature of the disease, that it may be regarded as one of the most important documents on the subject yet published in our country.

The first case reported in the army, occurred at Fort Columbus, Governor's Island, New York Harbor, on July 3, 1866. The disease then prevailed in New York city. Recruits from Governor's Island carried cholera to Hart's Island, from thence it was carried by the troops to David's Island and Fort Schuyler; total number of cases among the troops in New York Harbor, 181, and 78 deaths. The steamship San Salvador, which left New York on the 14th of July, took on board 476 recruits from Governor's Island; on the second day out, cholera appeared on board, and she arrived at quarantine near Savannah, Georgia, with twenty-five sick with the disease, and three dead. The troops were landed at Tybee Island, where cholera prevailed during July and the first few days of August; altogether, 202 cases, and 116 deaths. Of ten white citizens residing on the island, nine were seized with cholera, and five died soon after the infected ship arrived. In the same manner recruits from Hart's Island carried the disease to New Orleans, and Galveston, Texas. In the former city, there were ninety-three cases among the white troops, and twenty-four deaths; and 254 cases and 149 deaths among the colored troops. Hence the disease was carried by detachments to the colored troops at Forts St. Philip's and Jackson, below New Orleans on the Mississippi river, where there were seventeen cases and eleven deaths. Afterwards the disease appeared among the troops at Ship Island, Miss., Baton Rouge, La., Shreveport, Brazos Santiago, Tex., White's Branch,

Tex., Brownsville, Indianola, San Antonio, Austin, Tex., Richmond, Va., Norfolk, Va., Carlisle Barracks, Pa., Jefferson Barracks, Me., Newport Barracks, Ky., Atlanta and Augusta, Ga., Louisville, Ky., Bowling Green, Ky., Nashville, Tenn., Memphis, Tenn., Vicksburg, and Fort Riley, Kansas, Fort Leavenworth, Ks., Helena and Little Rock, Ks., Huntersville and Fort Smith, Arkansas, Fort Gibson, Cherokee Nation, and a few other places.

It appears from the tables, that out of a total of 12,780 men, there were 2,908 cases of cholera reported, and 1,209 deaths; of these there were 1,749 cases and 706 deaths out of a mean strength of 9,083 white troops; and 950 cases and 501 deaths out of a mean strength of 3,697 colored troops. A few isolated cases made up a total of 2,724 cases and 1,217 deaths of cholera for the six months. Among the white troops, the number of cases of cholera reported during the six months, was 192.6, with 77.7 deaths per 1000 of strength. Of diarrhœa diseases, 741.8 cases and 7.5 deaths per 1000. For the colored troops, the number of cases of cholera reported, was 259.4, with 195.5 deaths per 1000 of strength; of diarrhœa diseases, 574.5 cases, and 3.5 deaths per 1000; of all other diseases, 833.9 cases, and 11.4 deaths per 1000.

In conclusion, Dr. Woodward remarks that "on the whole, it must be admitted that the general tenor of army experience during 1866, is strongly in favor of quarantine, and especially points to the danger to the army incurred by the distribution of recruits or other bodies of men from infected points."

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, MAY 24, 1867.

DR. H. B. SANDS, President, in the Chair.

UNUSUAL INJURY OF ELBOW-JOINT.

DR. BUCK exhibited a specimen of unusual injury of the elbow-joint. The specimen was taken from a cadaver, about fifty years of age, that was brought from the medical ward, and his attention was directed to the elbow. It was represented to have been fractured twenty years before. There was no history of the case obtainable. The limb, as it lay beside the body, presented a rather remarkably straight appearance, not having the slightest degree of abduction of the forearm upon the arm, but a little inclined to adduction, and in a position of rather extreme extension, so that there was some bulging forward at the elbow. After removing the specimen, and laying open the joint posteriorly, it was ascertained that the articular extremity of the humerus was entire, which was also the case with the head of the radius and the olecranon, but the coronoid process had evidently been separated by a fracture. There were two pieces that were fractured; the smaller, which occupied the outer side, was equivalent to a good-sized pea in volume; the other fragment was considerably larger. These two fragments were united to each other, and to the surfaces from which they had been separated, by fibrous tissue, and from the smaller fragment there were threadlike fibres crossing the joint, and terminating at the outer condyle of the humerus. There were two that were nearly parallel with each other, and were joined together after the manner of a nervous plexus.

In conclusion, Dr. Buck could not conceive of these bands being made up of inflammatory adhesions, but was inclined to coincide with the opinion of a friend, which was, that portions or strips of synovial membrane had been torn up at the time of the accident, and had eventually dwindled down to mere fibres. The specimen, however, was especially interesting in connexion with the extreme rarity of an uncomplicated fracture of the coronoid process.

DR. POST thought that the bands might be the result of adhesive inflammation, becoming much elongated during the course of the twenty years since the injury. He further remarked, that writers spoke of fractures of the coronoid process invariably attended with dislocation of the ulna backwards, a phenomenon constantly recurring. Dr. Buck's case, though an exception to this rule, admitted of an explanation in that there was not enough of the coronoid process knocked off to allow of the displacement.

DR. JACOBI remarked, that it would be worth while to decide as to whether the bands referred to were formed of false membrane or not, by an examination with the microscope.

RUPTURE OF SEMILUNAR VALVES: A QUESTION IN MEDICAL JURISPRUDENCE.

DR. FINNELL, on behalf of Dr. John Beach, exhibited a heart taken from a man fifty years of age. The deceased was of intemperate habits, and after a certain dinner was noticed sitting on his chair dozing, from which he slipped off, falling upon the floor. On his getting up some persons present remarked that he was intoxicated, which statement led to a quarrel, in which the man was pretty severely beaten about the face, breaking the bridge of his nose, and otherwise inflicting bodily injuries. The following morning he was found lying upon his face on the floor of his room, dead.

On post-mortem examination, at the instance of the coroner, there were no lesions found, except those about the heart. The disease of this organ was mainly confined to the aortic valves. The left ventricle was very much dilated, the three semilunar valves were much crippled by atheromatous deposits, and one of these latter valves showed a laceration which commenced at its free margin, and extended a few lines backwards towards the base.

The parties engaged in the quarrel being arrested on a charge of murder, it was of the utmost importance to determine whether the man died as the result of injuries received in the quarrel or not; in other words, was the rupture of the valve the cause of death? and if so, was the said rupture the direct result of the beating which the deceased is said to have received?

DR. KRACKOWIZER, assuming that the rupture was recent, did not think it could have been the cause of death, inasmuch as the rupture in itself was not a formidable one, and besides the little disturbance which it would excite in the circulation would hardly serve to make much impression of a serious nature upon an apparatus already crippled for a long time with serious heart lesions. It seemed to him that the man might well enough have died independent of any quarrel, from, for instance, paralysis of the heart from hyperextension of the ventricle.

A COLLECTION OF ANOMALIES IN A MONSTER.

DR. JACOBI presented the body of a new-born infant which, considering the number of existing anomalies, was in itself a collection of specimens. He remarked upon the subject as follows:

This infant was born at full term, and, as far as I know to the contrary, of healthy parents; the presentation was normal, no one save a midwife was present at the birth, and the deceased lived but half an hour. In the body of this child there are a large number of anomalies.

The malformations found are of three different types:

first, those which refer to arrest of development; second, those which refer to excess of development; and thirdly, the results of intra-uterine disease.

We will commence with the head. The right eye is perfectly normal, but the left is evidently much atrophied, and contains in its centre a yellowish-grey looking point which is in all probability the crystalline lens. The exact description of the anomalies present has been furnished me by Dr. Althof.

Orbit, normal; fossa glandulæ lachrymalis, very deep; lids, lachrymal apparatus, and muscles well developed; also the nerves; vessels could not be traced.

Eyeball: longitudinal axis, 9 mm.; vertical axis, 6 mm.; horizontal axis, 7 mm.

Cornea: Diameter, 2½ mm. Epithelial cover changed into a compact mass—its cells could not be separated into the usual different layers. Bowman's membrane only fragmentary near the periphery. The proper tissue of the cornea had lost its characteristics—none of its normal constituents to be clearly distinguished. Descemet's membrane very well conserved—its cells in a state of proliferation. *Iris:* very much thickened—cellular tissue well conserved—no trace of either elastic fibres or Zinn's membrane—the whole enveloped in a very massive coat of organized lymph—firmly adherent to the lens. *Ciliary processes:* have disappeared—covered by lymph. *Lens:* dimensions normal—capsular (pyramidal) cataract—cells of anterior capsule partly conserved—lens fibres opaque, broken and split, full of molecular deposit—fatty degeneration in some parts near the posterior pole—altogether enveloped in a thick layer of organized lymph—no trace of zonula. *Corpus vitreum:* a tough, shrunken mass, without any organization. *Choroidea:* fully developed in all its layers—contains pus in great quantities—very numerous so-called "ganglion-cells"—exudations on glass-membrane (first time they came under my observation in so young an eye). *Retina:* entirely detached—rods and cones, also outer granules totally destroyed—traces of layer of inner granules—very fine ganglion-cells (perfectly normal)—varicose nerve-fibres with numerous nuclei. *Optic nerve:* well developed—papilla much swollen—central artery larger than usual—lamina cribrosa to be demonstrated without any difficulty—entrance of nerve normal.

This state of things proves that we have not to deal with a malformation of the eye, but with an intra-uterine irido-choroiditis.

The principal thing besides to be exhibited in the head is the presence of double hare-lip and cleft palate. The soft palate is easily distinguished on the two sides, the fissure being in the median line. The intermaxillary bone is separated by a large gap from the alveolar processes of the maxillary bone on each side, and is somewhat smaller than normal, rounded on its two sides, but especially so on the left, so that the second incisor tooth is protruding through the alveolar process. As in all these cases, the integuments are more retracted than the intermaxillary bone itself. The vomer is normal, but as usual bent a little to one side.

Another arrest of development is in the shape of a fissure in the abdominal integuments, in the neighborhood of the umbilicus, constituting umbilical hernia. There is found at the insertion of the umbilical cord, and hanging to the right of the median line, a tumor of the diameter of an inch or an inch and a quarter; this tumor evidently consists of nothing else but the amniotic covering of the umbilical cord, through which, in the fresh state of the parts, intestine could plainly be seen. There is another fissure in the left side of the diaphragm, constituting what has been called a diaphragmatic hernia, through which protrudes a greater portion of the spleen, as well as the stomach, covered, however, with the diaphragmatic pleura. This hernia then is not complete, as far as the viscera of the abdomen are concerned. There is still another fissure, to which I will return presently.

I will next show the supernumerary limbs. There are two sixth toes, both adjoining the fifth, both tolerably well developed, both having two phalanges, and both showing nails. This one on the left foot is connected with the second phalanx of the fifth toe, but the other one on the right side is connected by means of a joint, both to the metatarsal bone and the first phalanx of the fifth toe. The supernumerary fingers are simple appendages joined to the fifth finger of each hand, by integumentary tissue.

In regard to the umbilical hernia there was one point to which my attention was directed. I thought that inasmuch as this hernia was developed very early in fœtal life (the fifth or sixth week of utero-gestation), the development of the intestinal canal was somewhat impeded. On examination, however, I was struck with the rather normal appearance of the intestines. I thought that the intestines might be shorter than normal, but now I find that the colon of this infant is at least as long as we ordinarily find it in the fœtus. Generally it is very long in the new-born, so much so, that especially in the pelvic region the sigmoid flexure is not found on the left side but on the right; that there are, as a rule, sometimes two, and not unfrequently, as in this instance, three sigmoid flexures.

A very important anomaly belonging to the same class will be found in the heart. In the first place, contrary to the rule, the left side of the heart is more developed than the right; secondly, the aorta, instead of being small between the heart and the ductus arteriosus, was unusually large; and thirdly, the ductus arteriosus was very small indeed, notwithstanding the pulmonary artery was of normal size. Searching for a clue to these phenomena, I find the inter-ventricular septum open; and further, the entrances into the aorta and pulmonary artery are side by side, and originate in the same ventricle. Thus this is an instance of the common origin of the pulmonary artery and aorta in the left ventricle. I have not been able to look up more than one case of the kind on record. The possibility of a child living or developing to this extent is simply explained by the fact that the two ventricles in this case have acted as one, just as if there were present no septum at all.

There are a few other anomalies; for instance, the vertebral artery, instead of originating in the subclavian, takes its rise from the aorta itself, which I believe is not so very uncommon. The venæ cavæ are large, but normal in every respect.

[To be continued.]

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, JULY 5, 1867.

DR. ALFRED C. POST, PRESIDENT, in the Chair.

THE ECONOMY OF HUMAN LIFE.

DR. A. N. BELL read a paper entitled as above, in which he reviewed the various methods adopted by the ancients and moderns to secure the registration of statistical facts bearing upon the duration of human life. He alluded to the attempts made by Severus, Verranus, and Aurelius, which seemed to prove that the average life of the Roman citizen was 30 years. The city of Geneva, Switzerland, had some valuable mortuary tables, which with some intermissions dated back to 1549. Sweden and England also quite early turned

their attention to the same subject—in the latter country the Carlisle tables, which were wrong in principle and not to be depended upon, although generally adopted by Life Insurance Companies, originated.

He then briefly adverted to the causes tending to abreviate life, and maintained that proper food was much more important than good air and the most salubrious surroundings.

Dr. Griscom commented upon certain portions of the paper, and alluded to the fact that the 21st ward contained Bellevue Hospital. This, he thought, was a fact which did not belong to the ward, and should be eliminated in the statistical computations.

Dr. Bell said that the authorities were given in the foot-notes of his paper, and that some of them were derived from the reports of the late City Inspectors.

Dr. Griscom maintained that the statistics of the late City Inspectors were not to be relied on.

Dr. Harris thought that Dr. Bell had treated his subject with a great deal of candor, and had carefully discriminated between the practical and irrelevant. He moved that the thanks of the Academy be presented to Dr. Bell, which was unanimously carried.

In reply to certain inquiries, he stated that the records of other cities did not include the period of illness, which he regarded as of great practical value. The exactness of diagnosis in final causes of death he considered very important.

THE POWERS OF THE HEALTH BOARD AND THE PREROGATIVES OF CORONERS.

Dr. Rogers alluded to a case where "a certificate of death" had been given in a case not seen for three months one of the coroners at the request of a physician more conversant with the case and who desired an autopsy to demonstrate the diagnosis, suspended the funeral services for only a short time. He wished to know whether the physician in such cases would be sustained by the Health Board.

Dr. Harris thought it the duty of the physician to procure an autopsy when there was a doubt regarding the cause of death; and said that there was no law to prevent it. The case may then be surrendered to the coroners.

Dr O'Sullivan inquired what was to be done in those moribund cases seen only once, to which physicians of the poorer districts were summoned, evidently and mainly with the view to secure a certificate without the intervention of the coroner.

Dr. Harris regarded it inconsistent to refuse. The proper plan would be, if a post-mortem were refused, to give the cause of death as simply "unknown," and supplement it afterwards if possible.

Dr. Vankleek desired to know if the coroner was a judicial officer, and if when he was satisfied that there was no occasion for an inquest the physician could demand an inquest in the interest of vital statistics merely.

Dr. Harris replied that it was the coroner's office to take cognizance of all cases of violent or sudden deaths. He substantially recited the law on the subject.

[The question was then debated at some length, but without arriving at any express conclusion.]

Dr. Downs raised the point whether or not as a matter of courtesy the attending physician should not be invited by the coroner to be present at the inquest.

Dr. Harris thought that the attending physician should be invited.

DELEGATES TO THE INTERNATIONAL MEDICAL CONGRESS OF PARIS.

Drs. John C. Dalton, Fordyce Barker, and Charles D. Smith were unanimously elected delegates from the Academy for the International Medical Congress at Paris.

RESULT OF AN OPERATION FOR CARIES OF THE OS CALCIS.

Dr. Burrall presented to the Academy the patient upon whom he had operated and whose case had been published in the Medical Record (vol. ii., p. 171). The success of the operation was complete.

The Academy then adjourned.

Stated Meeting, June 19, 1867.

Dr. Alfred C. Post, President, in the Chair.

INSANITY.

Dr. D. Tilden Brown read the paper with the above caption from the pen of Dr. Butler of Providence, R.I. a synopsis of which appeared in the Medical Record (vol. ii., p. 125), as part of the Proceedings of the American Medical Association.

MR. HOFF AND THE ACADEMY.

Dr. Anderson presented a preamble and resolutions already published condemnatory of Mr. Hoff for adroitly using the name of the Academy in seeming endorsement of his nostrum.

The Academy then adjourned.

Called Meeting, July 8, 1867.

Dr. Alfred C. Post, President, in the Chair.

MEDICAL ELECTRICITY.

Dr. G. M. Beard read an interesting paper upon this subject, after which the Academy adjourned.

Correspondence.

DR. HERZOG ON CHOLERA—LETTER FROM DR. BURRALL.

To the Editor of the Medical Record.

Sir—The following sentence in Dr. Herzog's communication to the Record of July 1st requires a slight explanation, lest the quotation made in the little work to which he has referred should be thought to unqualifiedly endorse Drasche's views. Dr. Herzog writes:

"I must further mention that the objection made to the whole doctrine of this second point* by Drasche, and quoted in Prof. Clark's lectures and Dr. Burrall's book, has been already fully contradicted, 1861, as unfounded on facts."

In the book referred to, after a notice of Drasche's views, as well as those of Dr. Lorange and Dr. W. H. Thomson on epidemics of cholera in Beyroot, the following conclusions were arrived at—conclusions which have, I think, not been weakened by the teachings of the late epidemic:

"Such facts seem to show that a cholera epidemic may prevail upon a dry and rocky stratum, in which the moisture lies more than fifty feet below the surface, when it appears among a people careless of the ordinary laws of health, and in the vicinity of an abundance of decaying excretions; also that such excretions favor the spread of cholera more than a malarious atmosphere. At the same time, the fact that the disease was not

* The dependence of cholera epidemics upon subsoil waters as one essential point.

indefinitely protracted does not weaken the theory that the dejections contain the infectious material, for the striking mortality among the scavengers in Beyroot is an additional argument to the many more in its favor; it only proves that the laws upon which the duration of a cholera epidemic depend are still unknown."

Respectfully, F A. BURRALL, M.D.

THE UTERINE ELEMENT IN PRACTICE AGAIN.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—In this article I will touch on some points that I had not space for in my previous one.

Many specialists talk of ulceration of the *os uteri* as if it were a very common thing. Now in my experience, which has by no means been a small one, it is very uncommon. And this is the experience of many esteemed friends in our profession. The lesion which I have most often found does not at all deserve the name of ulceration. It is a small patch of redness, sometimes wholly on a level with the rest of the surface, and sometimes a little raised, and occasionally presenting something of a fungoid appearance, but never depressed. Commonly touching this a few times with nitrate of silver suffices to remove it. And I have no doubt that this lesion is often removed without any local application, by the use of remedies addressed solely to the state of the general system, just as is true of many other local difficulties; not so quickly, however, as when the local application is used also.

Dr. Meigs, who has had a similar and of course a much larger experience than mine, on this point, I find on referring to his article on diseases of the neck of the uterus in the sixth volume of the Transactions of the American Medical Association, speaks of the folly of calling such lesions ulcers, and says emphatically that "an ulceration of the womb is among the rarest of diseases."

It is astonishing what eyes some of these specialists have. Their declarations often bring to my mind the old couplet,

> "Optics sharp, it needs I ween,
> To see what is not to be seen."

In one of the last cases in which I witnessed the lesion above referred to, a physician had given—yes, given—the patient womb on the brain by telling her that she had a very large ulcer. I found nothing but one of these red patches—quite a small one—which was cured by some three or four applications of nitrate of silver. It was far from curing the patient, however, for it did not reach the chief source of the difficulty, the brain.

And here I must notice one practice which merits no milder term than abominable, but which I fear is somewhat common. I have said that some of the specialists on female diseases are very instructive and communicative with their patients and their friends. They take special pains to make them understand the nature of their complaints. In doing this some have gone so far as to let friends of their patients look into the speculum and see for themselves the ulcers, which was, of course, a very intelligent and satisfactory act. Perhaps, in the march of modern improvement, they will soon get so far as to let the patients themselves look in, by means of reflectors adjusted for the purpose.

In the case I have just referred to, this looking in was practised, as I learned, in this way: On examining the patient I found that a lady-friend of hers was standing by me, trying to look into the speculum, and as I seemed rather surprised, she informed me that Dr. —— asked her to look in and see the awful ulcer that was there. I have already said that there was nothing there but a small red patch, and yet Dr. —— only a few days before saw a large ulcer. What the lady saw, thinking it to be an ulcer, I know not—I did not care to discuss matters of diagnosis with her, though Dr. —— might have done so.

Here is another case. A physician of homely good sense, who never has used a speculum, but who knows more about female diseases than some who make a very common use of it, was consulted by a man in regard to a difficulty affecting both himself and his wife, and was told plainly that he had contracted gonorrhœa, and had given it to his wife, and the doctor prescribed for both accordingly. Soon after, being called in to the family for some purpose, the wife said to him, "I have had Dr. —— to see me, and he has examined me with an instrument, and he found an ulcer on the mouth of the womb." "Poh!" said he. "Well, it's true," said she, "for the doctor told Mrs. —— to look in, and she saw it."

I give still another case. A friend whom I happened to meet, consulted me incidentally in regard to his wife's case, stating that she had for some time been in ill-health; that she had recently, though very reluctantly, come under the care of one who had made a specialty of female diseases, and that he had found an ulcer on the mouth of the womb. I doubted very much the truth of the diagnosis, simply because he said further that he had seen the ulcer himself, and was quite disposed to talk about its appearance. I was so disgusted that I had very little to say in regard to the case—disgusted not with the husband, but with the physician, who had probably egregiously imposed upon a non-medical man, and had certainly transgressed the plainest rules of delicacy in thus indoctrinating him so unnecessarily, and probably fruitlessly, on such a subject and in such a manner.

Perhaps your readers will say that physicians who do such things cannot be respectable men. But really all the three that I have alluded to, have a respectable standing in the profession, and one of them is a very prominent man, known widely, and particularly as a specialist in female diseases.

If these and kindred practices are allowed to extend themselves, we may soon have ulcers and displacements of the womb talked about in promiscuous circles as freely as we now do fever, or colic, or cholera. I have sometimes felt a little queer when young ladies have had something to say in the presence of gentlemen about cases of dysentery and diarrhœa, and I am very much afraid that some of them will make me feel still more queer by remarking on the suffering of some of their friends from diseases of the womb. The tendency certainly is towards such offences against propriety and true delicacy.

There are some other points still that I must defer to another article.

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New Publications.

TRANSLATIONS OF THE INDIANA STATE MEDICAL SOCIETY. 17th Annual Session.

THE PRINCIPLES AND PRACTICE OF DISINFECTION. By PROF. ROBERTS BARTHOLOMEW, A.M., M.D. R. W. CARROLL & Co.

MEDICAL REGISTER OF THE CITY OF N. Y. FOR 1867. JOHN SHRADY, M. D., Editor. N. Y. PRINTING Co., 81, 83, 85 Centre St.

Medical Items and News.

PERSONAL.—"DR. MARY E. WALKER, according to a Paris correspondent (July 8), was present at the Fourth of July banquet at the Grand Hotel, where she was wrapped up, *à la* Kirby, in the American flag. She evidently wanted to make a speech, but would not be heard. She wears her medal, voted her by the American Congress for brave womanly cares and attentions bestowed upon sick and wounded soldiers on the field and in the hospitals during the war, and for four months' martyrdom in the Libby prison. This medal has procured the 'doctor' admission into the medical circles here, and given her, I am informed, great facilities for observation."

SURGEON J. H. BAXTER, United States Volunteers, late chief medical officer Provost Marshal General's Bureau, was confirmed by the Senate as Medical Purveyor, United States Army, with the rank of Lieutenant-Colonel. This promotion in no way interferes with the completion of the medical report of the Provost Marshal General's Bureau, upon which, in accordance with an Act of Congress, Dr. Baxter is now engaged.

BREVET-LIEUT.-COLONEL J. R. SMITH, Surgeon United States Army, has been relieved from duty as Medical Director of the Fourth Military District, and assigned to duty as Post Surgeon at Jefferson Barracks, Missouri, relieving Brevet-Colonel E. Smith, Surgeon United States Army, who has been assigned to duty as Medical Director of the Fourth Military District.

DR. WM. T. NEALIS has been appointed Physician to the City Prison by the Commissioners of Public Charities and Correction.

DR. ELLSWORTH ELIOT has been elected one of the Trustees of the College of Physicians and Surgeons, *vice* Dr. Benj. Ogden, deceased.

JAMES R. WOOD, M.D.—We take pleasure in announcing that the degree of LL.D. has lately been conferred upon Dr. Wood by the Genesee College.

DR. CHARLES E. MORGAN, of this city, died suddenly August 4. We will give an obituary notice of the deceased in our next.

NEW YORK HOSPITAL.—Dr. James W. McLane has been elected one of the attending physicians to the New York Hospital, vice Dr. Thomas B. Dash, resigned.

SENECA CO. MEDICAL SOCIETY. — The anniversary meeting of the Seneca County Medical Society was held at the Eagle Hotel, in Waterloo, on Wednesday, July 10th. The President of the Society, Prof. Bolter, of Ovid, delivered an interesting address. The election of officers for the ensuing year resulted as follows:—*President*, Dr. O. S. Patterson, Waterloo; *Vice-President*, James Flood, Lodi; *Secretary*, S. R. Welles, Waterloo; *Treasurer*, E. J. Schoonmaker, Tyre; *Censors*, W. W. Wheeler, Farmer Village; A. Emens, Fayette; J. Dunn, Lodi.

THE DEATH OF SIR WILLIAM LAWRENCE, BART., F.R.S. —The London *Telegraph* announces the death of this distinguished surgeon, at his residence, Whitehall Place, on the 5th instant. The deceased was born at Cirencester, on the 16th of July, 1783, and was, therefore, eighty-four years old at the time of his death. He received a preliminary education at a classical school near Gloucester, and was afterwards apprenticed to the celebrated Abernethy. So decided was his zeal in anatomical pursuits, that before three years of his apprenticeship had expired he was appointed Demonstrator of Anatomy at St. Bartholomew's Hospital. He finished his professional education, and became a member of the Royal College of Surgeons on the 6th of September, 1805; was appointed Assistant Surgeon to St. Bartholomew's Hospital in March, 1813, and succeeded to one of the principal surgeoncies in May, 1824. He had previously been chosen one of the Professors of Anatomy and Surgery to the College of Surgeons, and delivered the lectures there for four years. For several years Mr. Lawrence lectured on surgery at different medical schools, his celebrated lectures on Physiology, Zoology, and Natural History of Man giving rise to the charge of materialism, as well as being the subject of severe criticism. The Governors of the Royal Hospitals at Bethlehem and Bridewell requested the author either to resign his appointment as surgeon of those institutions or to retract his convictions. In compliance with this demand he wrote a long letter expressing regret at having given utterance to the pernicious doctrines contained in the lectures, the published copies of which he afterwards sold to a London publisher for exportation to this country. In 1826 the deceased made himself conspicuous in his opposition to the Council of the Royal College of Surgeons, although two years subsequently he became a member of the same Council, having been elected to fill a vacancy occasioned by the death of Sir P. M'Gregor, and in 1840 was promoted to a seat in the Court of Examiners. Sir William Lawrence, who was a member of many learned and scientific societies, both at home and abroad, had obtained the highest honors which can fall to the lot of a surgeon. In addition to those already mentioned, he had been twice elected a President of the Royal College of Surgeons, viz. in 1846, and again in 1855. On the passing of the Medical Act, and the institution of a Council of Medical Education and Registration, Sir William was nominated by the Crown a member of that body. He was the senior sergeant-surgeon of the Queen, and only a few months since was created a baronet. By his decease there is a vacancy in the Council of the College of Surgeons. The deceased Baronet leaves a son, who is a member of the College of Surgeons, and medical officer in the Queen's Indian army, as well as two daughters.

THE CHOLERA.

IN EUROPE.—The official accounts of the cholera in Sicily, dated Palermo, the 29th of June and the 4th of July, report as follows: In the province of Girgenti, from the 18th to the 27th of June, 2,573 attacks and 1,371 deaths; Caltanisetta, from the 17th to the 27th, 1,305 attacks and 762 deaths; Trapani, from the 19th to the 27th, 17 attacks and 13 deaths; Catania, from the 23d to the 28th, 107 attacks and 55 deaths. For the week ending July 4, for the provinces of Catania, Caltanisetta, Girgetti, and Trapani, the attacks were 2,383 and the deaths 1,421. Palermo and Messina enjoy perfect health, and both have established cordons against infected districts.

IN THE UNITED STATES.—The cholera appears to have manifested itself decidedly among the troops at Fort Larned and Dodge, and still prevails at Fort Harker, all of which are stations upon the great "plains," or prairies of the West, and designed more particularly as defences against Indian depredations. Exchanges say "it is raging fearfully in Ellsworth, Kansas, the average mortality being ten a day. The place is almost completely deserted."

A telegram has also been lately received at the War

Department from Fort Leavenworth, Kansas, announcing the death of Lieut.-Colonel George M. McGill, Assistant Surgeon United States Army, by cholera, near old Fort Lyon, Colorado Territory, on the 20th ult. The telegram also stated that two companies of the Thirty-eighth United States Infantry passed old Fort Lyon on the 22d ult., and reported having had twenty cases of cholera and seven deaths up to that time.

Another account states that "seven cases occurred in one family at Salina, Kansas, which resulted in three deaths."

In the lower grounds of the Mississippi Valley, particularly in the region of broken levées and neglected agricultural interests, the pestilence has likewise reared its head. The same is true of Arkansas, the plantations in the vicinity of Pine Bluff, Des Arc, and Helena having been sorely visited. A planter at the latter place lost twenty-five hands in one week. The mortality from the disease at Memphis, Tenn., at one time reached as high as fifty per day, but has since visibly declined.

In our own city there have been no importations from abroad, although a few cases have been returned to the Health Board, not all of which, however, were regarded as authentic.

MAISONNEUVE'S OPERATION FOR FISTULA IN ANO.—The method of operating is as follows:—The patient is placed upon the side in which the fistula is located, while an assistant elevates the opposite buttock. One of the extremities of a wire is passed into the external orifice of the fistula, and brought out with the finger of the surgeon, previously introduced by the rectum. The two extremities of the wire are then attached to the two branches of the *écraseur*, and by a rapid turning of the screw the tissues are quickly bound and crushed by pressure. The dressing used consists simply of charpie saturated in a solution of phenic acid (one part in a hundred) repeated once daily.—*N. O. Medical and Surgical Journal. Richmond Medical Journal.*

M. NÉLATON has recently been named a member of the Institute, and has also received from the hands of the Prince Imperial of France, his distinguished patient, the insignia of Grand Officer of the Legion of Honor. On the latter occasion he merely called upon the Prince at St. Cloud, to pay him his usual visit, when his young patient said to him, "Wait a little, doctor, I have something to give you." He then presented the cross and ribbon to the surgeon, saying, "It is not quite new, as my father has worn it for some time." M. Nélaton immediately drove to the Tuileries to thank the Emperor. His Majesty confirmed the welcome fact, and added, "I shall never forget, doctor, the care which my son has received from you." It would seem impossible to confer a signal favor with greater delicacy and grace. M. Rayer, formerly Dean of the Faculty, is the only other member of the medical community in France who has been invested with this high honor.

TRAINING THE YOUNG.—Let us here for a moment linger on the question, what would happen to a young horse if we were to work him in a cart as soon as he was one year old, or if we attempted to train a puppy as soon as it could see. The result would certainly be more likely to produce death than a vigorous adult age. In like manner, the "forced" intellect soon dies out, and if the prodigy of the youthful nursery survives to be a man, he is mostly the biggest fool of the family—while he, who from being the greatest dunce was let alone while young, developes into the sensible, thoughtful, and plodding man.—DR. INMAN. *London Medical Mirror.*

PHOTOGRAPHS OF THE PRESIDENTS AND ACTING PRESIDENTS OF THE AMERICAN MEDICAL ASSOCIATION.—It will be recollected by our readers that at the last meeting of the American Medical Association, Prof. Alden March, of Albany, presented to the association a photograph of all the presidents of that body, which he had taken great pains to collect. We have recently received a complete set of the above, twenty-one in all, which have been admirably reproduced by Messrs. Jeffers & McDonald, of 519 Broadway, Albany. We are glad to learn that Prof. March having generously supplied them with the negatives, they are enabled to supply the profession at a moderate price. The collection is an exceedingly valuable one, as many of those representative men have passed away. The likenesses are truthful and well executed.

IS MY CONSULTING PHYSICIAN A GENTLEMAN?—Dr. U. R. Milner, of Jefferson City, La., in a communication to the *Southern Journal of Medical Sciences* "on the Professional Manners of Physicians," makes the following remark, which, unfortunately for the profession, is a well deserved reflection upon the character of many a consulting physician. "It is a bane of the profession, and a fact attested by the experience or observation of every member of it, that at this day consultation, which is a most valuable auxiliary to successful practice, and when properly conducted and appreciated, an invaluable boon to afflicted man, is made, eight times out of ten, the opportunity of one party or the other to injure the other either by insinuation of some sort or by downright slander. What manners! And what is the effect? Consultations are shunned and ignored, and a general distrust is engendered. If a high-toned, honorable gentleman and doctor is forced to have consultation, and some one is proposed and preferred by the individual or family whom he does not know, the first question he asks himself is, 'Is he a gentleman?'"

CONSANGUINEOUS MARRIAGES.—Dr. Robert Newman, of this city, having been appointed at the late meeting of the "Medical Society of the State of New York," upon a Committee to investigate and report upon the result of consanguineous marriages, asks of his professional brethren answers to the following questions, which may be transmitted to him, 118, West Houston street, before November next: Name (initial) and age of husband, nativity, age when married, constitution, health, deformities, peculiar diathesis, health of his family, hereditary diseases, deformities, &c., Name (initials) and age of wife, nativity, age when married, constitution, health, deformities, peculiar diathesis, health of her family, hereditary diseases, deformities, &c. How are the parties related to each other? How long married? How many children, or sterility? Abortions; cause; how many, and at what period? Children died, at what ages and from what diseases? The constitution, age and present health of living children, deformities, mental conditions, idiocy, cretinism, deaf, mute, blind, epilepsy, albinism, insane, &c., Remarks and other information.

It will be seen that these questions are very comprehensive in their scope, and as answer accurately given will help to clear up many unsettled points we hope all who are able to give him any information, especially those residing in this State, will do so in the assurance that the material furnished will be properly used.

A NEW ITEM IN A BILL.—One charge in a lawyer's bill against a client was, "For waking up in the night and thinking of your business—five dollars." How many such items could with equal propriety find their way into the bills of the physician?

Original Communications.

SOME CONSIDERATIONS IN REGARD TO THE TREATMENT OF HIP-JOINT DISEASE.

By CHARLES F. TAYLOR, M.D.,
OF NEW YORK.

The question is often asked me, "What is your experience in the use of the splint in hip-joint disease?" "Do you find the results as satisfactory as we have been led to expect by those who have been the chief advocates of the counter-extension plan of treatment?" These questions not only evince a disappointment in practice with the splint, but imply a doubt as to the principles of treatment. Not long ago an eminent surgeon who has had abundant opportunities for witnessing the results of the *splint* treatment as practised by a prominent advocate expressed to me his entire disbelief in its efficacy.

My own experience with this mode of treatment having been entirely satisfactory, I propose to give some reasons (as they appear to me) for the frequent failures in its use, together with my own method of procedure.

I believe that the majority of failures in the use of the counter-extension splint are owing to the inefficiency of the instrument employed, and to a practical disregard of the true end to be sought by its use.

An apparatus, like a remedy, should be the embodiment of an *idea*. In the making up of a prescription, or the construction of an apparatus, every element should contribute to the completeness of the whole. We may have antagonistic mechanical forces as well as incompatibles in drugs. In proposing any medical means we should ask ourselves—1st. "What is the ultimate object to be accomplished?" 2d. "What are the simplest means of accomplishing the object?" 3d. "What are the elements which contribute towards the end sought?" 4th. "What are the elements which may interfere with that end, or which may be incompatible with it?"

We must correctly answer these questions before we can reach general success in a proposed treatment.

Let us analyze the objects to be secured by the counter-extension splint.

Dr. H. G. Davis first devised "the splint." The object was *counter-extension with locomotion.*

Simple counter-extension had been used before. Locomotion would secure for the patient fresh air, exercise, appetite, digestion, health, *provided* the splint were sufficient to arrest the disease. In Dr. Davis's hands we will say it has been thus efficient. But his instrument contained several elements incompatible with the main object sought—efficient counter-extension—and which interfered with its success in hands not accustomed to overcoming the difficulties inherent in the apparatus.

In the old splint the ligaturing of the thigh by the perineal strap made it always difficult, and often impossible for the patient to bear sufficient force to accomplish the purpose in view. This was partially remedied, however, by the cross-piece and joint proposed by me, and which have been universally adopted.

Again, "continued *elastic* extension" contains an almost fatal element. "*Elastic*" (India-rubber "elastic") extension is incompatible with muscular extension. If the muscles overcome resistance they are not extended. If the resistance is so great that the muscles are obliged to yield, then the extension is *not* "elastic" to the muscles, whatever it might be to a greater force. "Elastic" extension applied to muscles is an absurdity. Either the resistance is so great that it requires more than the force of the muscles to cause it to exhibit its elasticity when it is *not* elastic to the force the muscles possess, or the elasticity of the rubber yields and the *actual* resistance is made by the webbing surrounding the rubber. In either case the *actual* resistance is non-elastic. But even if elastic resistance were not incompatible with muscular extension, it would be rendered so by the incompetency of the material used. India-rubber has no definite resisting force except under compression and equable temperature. But India-rubber strings incorporated in webbing become softened and attenuated by the heat of the body, and do not retain for many minutes the resistance they had when applied. It is its wonderful facility for becoming stretched-out and utterly useless which makes success of comparatively easy attainment with the use of rubber. So much for "elastic extension" in overcoming muscular action. In regard to its effect upon the diseased joint it is even more ineffective for good.

The splint is used in preference to confinement with the weight and pulley, on the theory that it gives equal protection and immunity to the joint with the advantage of fresh air and exercise. But how can it protect the joint if the extension be elastic? Whenever the force of progression happens to be for the moment greater, then the extension suddenly yields and ceases to afford protection at the very time when it is most needed. Hence the joint is liable to successive concussions with the varying force thrown upon the unequal resistance.

Here, also, the only salvation is the fact that the rubber straps soon stretch out and become, in effect, inelastic.

The simple truth is that muscles yield readily to firm, unyielding resistance, and this only should be used to overcome their action.

Thus much for some of the elements operating at the pelvic end of the splint.

The lower end is attached by adhesive straps. I will not discuss the plan of making traction on from the foot, because I cannot see how such a plan could be seriously adopted. Its inefficiency must be apparent.

Shall motion be allowed at the knee—in other words, shall the instrument reach to the knee, or to the ankle? In 1860, before I had ever treated a case of hip disease, my attention was called to the subject in consequence of the discussions going on at the time. I then devised the short instrument, which has since, for some unaccountable reason, been labelled with Dr. Lewis A. Sayre's name. Inferring that the length of the instrument, with the preventing of motion at the knee, was for the purpose of securing greater room for applying the adhesive straps, I reasoned that more surface could be found inside the thigh than below the knee, with the apparent advantage of allowing free motion at the knee. A cut of this apparatus was published in the *Medical Times* of July 20, 1861.

My first case satisfied me that my reasoning in regard to it was fallacious. In the first place, experience proves that there are decided advantages, with no important disadvantages, in *preventing* motion at the knee. Primarily it is an advantage (when counter-extension is complete, *but not otherwise*), to cause the motion of progression to be at the hip instead of the knee, as it would be if the latter were not confined. Again, it is utterly impossible to keep on the adhesive straps while the muscles of the thigh—an inverted cone itself—are alternately shrinking and swelling beneath them in moving the leg. The straps will slip off.

Dr. Prince says it is a "beautiful little instrument;" and so it is; but it is good for nothing, being practically inefficient except with an amount of attention seldom given any case. I did cure one case with it, but I saw my patient daily for months, and the waste of adhesive plaster was enormous.

Another serious objection to the short instrument is, that it is impossible to secure so good extension of the thigh upon the pelvis: that is, the flexor muscles cannot be so well extended as they can be with the long splint. But even with the long splint we have this disadvantage, viz. that the adhesive straps will yield, relax, and slide more or less, requiring constant watching and re-adjustment of the apparatus; and this is particularly the case where the patient is allowed to walk about.

In such circumstances the adhesive straps must not only keep up extension, but are forced at each step to bear the weight of the body in addition. A slight relaxing of these straps taking place, there is no more extension; and as they always do relax or slide more or less, let me ask here, what becomes of the theory that the head of the femur is partially "drawn out" of the acetabulum? Is the relief derived from the splint in consequence of this alleged fact? What with the relaxing of the adhesive straps and the "elastic" extension, we should have a continual churning motion in the socket which would not be very favorable, one would think, to the diseased joint!

Employing more force in these cases than practitioners generally do, I am yet incredulous about the alleged "drawing out" of the head of the bone. I do not believe it occurs, or ought to occur, nor do I believe that it would be anything but harmful if it did occur.

The sole object of counter-extension is to destroy the tonicity of the muscles about the hip-joint. This destruction of tonicity gives relief and motion, and is all we can do by mechanical means for this disease. If we can do it, and still allow the patient fresh air and exercise, so much the better. And this should be our aim, and until we have fully accomplished it, we have not realized the benefit of counter-extension treatment at all. If a splint or weight be applied it may assist in keeping the limb steady and quiet, and in that way the patient may improve; but the improvement is due to the confinement and protection *from* motion, rather than to counter-extension *and* motion, which latter are the two sources of benefit when counter-extension is efficient. I repeat, the *muscular tonicity must be temporarily destroyed.* The counter-extension must be carried to that point.

And here we have a certain guide as to the amount of force to be used and the extent to which it is to be carried. When we have destroyed tonicity, our chief labor is done. Afterwards we need only use force enough (which will be relatively small) to keep up the flaccid condition of the muscles till the disease subsides. We might even temporarily dispense with the splint altogether, except that when the extension is entirely suspended the muscles quickly recover their tonicity; and, besides, the weight of the body would not be supported in locomotion if the splint, or some form of crutch, were not used. This explains how a case may progress favorably with the unequal extension which is inevitable with the splint, provided the muscles have first been relaxed by diminishing their tonicity. In such cases we do not have those contractions which are apt to follow (even when they are prevented from accompanying) the active stage of the disease. It may be, and generally is, followed by weakness of the muscles about the joint, which may require special treatment to restore their tonicity. This is a sacrifice we must make to the greater good of arresting the diseased action in the joint. On the other hand, if contractions accompany or follow the disease, we may be sure that our counter-extension has been inefficient, and therefore worthless *as* such; and that the improvement, if any, is due to the quiet fixation of the joint, which the splint has been a convenient means of accomplishing. And I suspect this is very often the case in the use of both splint and pulley.

I have mentioned as one serious objection to the *short* splint, the impossibility of acting adequately on the flexor muscles. Both long and short splints possess a grave fault, in the impossibility of acting on the adductor muscles. In fact, the position of both on the outside of the leg rather favors adduction of the leg, and there certainly is no possible way of specially extending the adductor muscles, the ones most particularly influenced by contractions. They can simply extend in the direction of the thigh, acting with equal force on the already extended, as well as contracted, muscles. They do not sufficiently tend to correct deformity after it has begun; hence a great deal of force used is wasted, from the sheer impossibility of actually antagonizing a contracted muscle.

Now, if we could bring our force to act directly on the contracted muscles (the adductors, for instance), a relatively small amount of force would overcome them, and the point would be gained at once, for the other muscles are already extended by their position. Hence I have used for several years an apparatus with *two* perineal bands. The "cross piece" at the top is carried nearly around the pelvis to the opposite side, so that it becomes a hip-*band.* The steel is extended far enough for fastening to it the perineal strap—about three-fourths of the circumference of the hips—and terminated by a leather strap. Sometimes there is an abduction screw at the joint, between the hip band and splint, but experience proves that all the motion required can be secured by regulating the perineal straps. Tightening the opposite strap would of course abduct the thigh and act directly on the adductor muscles. By thus having every action of the joint under control of the instrument, we are enabled to accomplish a *definite* purpose and secure better results with less force.

There is another great advantage in having two perineal straps. The danger of abrasion of the skin is diminished more than one-half, and if it should become sore we can loosen, or even take off, the strap of one side, the action of the instrument being temporarily kept up by the other strap. We thus add to our resources against accidents.

This arrangement of double perineal straps (and, when necessary, abduction screw) seems to make the upper end of the splint very satisfactory, if not perfect in its action, for it enables us to realize without delay or indirection the object of the treatment—the reduction and often temporary destruction of muscular tonicity, *especially of the muscles most contracted.* But there is still the difficulty of keeping up sufficient uniformity of extension, especially with active patients, after the subsidence of the acute symptoms.

In spite of the utmost care there will be motion at the lower end of the splint, and a tearing loose of the adhesive straps at the bottom, which, with the frequent want of care on the part of the patient's attendants, after improvement seems to be assured, causes a liability to too much concussion in the joint, and a regaining of tonicity of the muscles and thus hindrance to the most favorable progress of the case. Still there is not so often actual recurrence of the disease, once

subdued, as prolonged recovery with chronic irritability in the joint, as shown by lingering tendency to contractions of the muscles. While the patient is quiet, there is not the least difficulty in accomplishing all that is desired with the splint just described. Only when the patient throws his weight upon the splint in walking do we find the adhesive straps insufficient to resist for any length of time the severe and unequal strain thus thrown upon them.

In other cases, as disease of the knee and ankle, and dislocation of the hip-joint, I have been in the habit of using what may be called the *expectant* treatment. A simple apparatus is made, attached to the shoe and extending to the perineum, where it terminates in a well padded crutch, turned outward so as to rest under the ischium. The apparatus is made a little longer than the leg—with a contrivance for extending when needed—so that in standing or walking the heel never reaches the ground, and of course the whole weight of the body rests on the instrument. The patient then has motion of the joint, but no weight is thrown upon it. The result of this protecting, expectant treatment, has been so satisfactory, that it suggested the idea of incorporating it with the counter-extension hip-joint splint. The result is shown in the accompanying figure. The splint is

extended to the bottom of the foot and turned under it, from which position extension is made. Adhesive straps are applied to *both sides* of the *whole* leg, in the usual manner, the inside strap terminating in a buckle (*a*) and the outside strap terminating in a short piece of webbing, which is passed through a slit in the apparatus, thence under the foot through another slit (*c*) at the end of the foot piece, and buckled to the inside strap just above the internal malleolus. Thus extension is made from the bottom of the foot. Thus, also, when the patient attempts to walk it is the instrument which strikes the ground and sustains his weight, without in the least increasing the strain on the adhesive straps. In fact it is an ever present crutch, allowing motion of the joint, but not allowing weight to be borne on it. Extension is kept up continually, more surface is allowed for the adhesive straps, and only the legitimate strain is ever thrown upon them—that which antagonizes muscular action—but never the weight of the body. There is one other advantage which this instrument has over others. Usually we have to depend much on the care and judgment of others—the patient's parents, friends, and nurses. With the splint terminating in the middle of the leg there is no definite point where it should be, and hence no guide to the eye or definite indication by which inexperienced persons can know if the apparatus is properly acting. Hence the difficulty of getting the most careful directions carried out. But by the crutch and extension splint combined, the patient himself knows at once if the instrument is acting or not. The least slipping or relaxing of the straps makes it longer under his foot, and impedes his walking, and he desires it readjusted. But even if it were not actually extending the hip—and after the tonicity of the muscles is once overcome, it often need not—the patient is entirely safe from the pressure of weight and concussion in the joint. He walks, but the leg hangs suspended. Indeed, many have advised, as I sometimes have when circumstances were such that nothing better could be done—patients to wear a thick sole on the foot of the *well* leg and use crutches, letting the lame leg hang. The only difficulty is in carrying the plan into practice with sufficient perseverance and uniformity. If the crutch can be attached to the leg as in this instrument, and concealed from view, and always ready with its protection, the results of the expectant treatment might be better.

One word about applying adhesive straps. I have seen several legs irretrievably spoiled by applying the straps on the leg only, neglecting to include the thigh. This has generally been done where the treatment had been by the weight and pulley. Force enough to relax the powerful muscles about the hip-joint must be liable to pull asunder the weaker ones at the knee and ankle, if traction be made only from the foot or leg. I have seen great injury result from such thoughtlessness, the patients recovering from the hip disease only to find themselves crippled for life with knees so weakened as to be wholly unable to sustain them. Under all circumstances the straps ought to embrace as much of the thigh as possible. Let no one understand me as intimating that with the best appliances disease of the hip-joint is easy to cure, or to treat. Not so. Success is only to be obtained—I mean the best success, which is the only result we ought to be satisfied with—by diligence, care, and perseverance.

A perfect splint, even if that were attainable, is not enough. There is no magic in surgical apparatus, let them be never so cunningly devised. They should have a function corresponding to our idea of the requirements of the case. Unless we diligently attend to little details, we cannot expect the best results. Success is generally in the ratio of our efforts to secure it.

Intestinal Absorption.—According to Letzerich (*Virchow's Archiv*, xxxvii. 232), fat and albumen are not absorbed by the epithelium of the intestine, but by vacuoles between the epithelial cells, which lead directly from the intestine into the lacteals. Fat in the epithelium he considers pathological, and generally due to excess of fat in the food.

THE PROTECTIVE USE OF QUININE.

By STEPHEN ROGERS, M. D.

NEW YORK.

It must have been brought home to the appreciation of most people, who have devoted their time and brains to the investigation of any subject, that popular errors relating to that subject,—and having their origin in the published conclusions of unqualified observers, or observers of too limited experience—are most obstinate things to overcome. The practical confusion which one witnesses in the popular, as well as the professional mind, resulting from these publications, is often vexatious and disheartening to the studious investigator and author.

These reflections were again called forth by the perusal of an extract from the *Nashville Journal of Medicine and Surgery*, published in the RECORD of July 15, under the title of "Quinine as a preventive of malarial fever."

As that extract contains unwarrantable statements, is too indefinite and confused to serve as a guide to either practitioner or layman, and is therefore, in my opinion, a dangerous piece of medical literature. I offer you the following extract from my memoir upon the uses and virtues of quinine, published in the *Transactions of Medical Society of the State of New York for* 1862. I therein treat of the uses of quinine in miasmatic disease in the following order, viz. first, its protective uses; that is, to protect from miasmatic infection. Second, its preventive uses; that is, to prevent paroxysms of miasmatic disease after infection has taken place. Third, its curative uses; that is, to cure miasmatic disease during the paroxysm. As your published extract from Dr. White's report involves the principles set forth in my first subdivision, I send you that portion only which reads in substance as follows:

Among the first, if not *the* first danger the emigrant is exposed to on his arrival in a miasmatic locality, is that attending the fever known by the various names, remittent, bilious remittent, climatorial, acclimating, climatic, and, as I prefer, *first miasmatic fever.*

Consequently, the first, the invariable, and the inevitable inquiry is, what can be done to avoid it? And eminently proper are such inquiries, for, with comparatively rare exceptions, the paroxysms of this first miasmatic fever are by far the most severe and immediately dangerous of any the individual will ever suffer however long he may remain in the unhealthy region.

This is *the* fever which, both in the West and in the East Indies, in Africa and in tropical America, has given the terrible character to tropical fevers which is pre ty universally entertained. It is of paramount importance then for the recently arrived resident to adopt all possible means to escape this particularly dangerous first attack. But the query arises, as he is to become a permanent resident, will he not sooner or later certainly suffer his first and severe type of fever?

The law relating to this first miasmatic fever, is similar to, or identical with that observed by yellow fever, viz. the longer one resides in the locality where it is suffered, the less liable he becomes to it, so that while in the case of yellow fever he may escape it altogether, in miasmatic disease, though he may at a later date suffer mild paroxysms often, yet the first violent climatorial attack he escapes altogether.

In both cases a species of toleration of the surrounding influences is acquired, their poisonous impression upon the sensorium is lessened; so that in the one case the disease is escaped altogether, and in the other the intense and destructive character of the paroxysms of the early attacks is not witnessed, except in rare cases.

This fact was stated by Dr. James Johnson, to be the result also of a continuous high temperature; and he attempted to employ this opinion in explanation of the fact that Europeans do not suffer yellow fever in the East Indies, they becoming "seasoned," as he termed it, by the long sea voyage in the tropics.

Recorded experience, however, destroys this argument of Dr. Johnson. I am acquainted with the fact that persons who have crossed the tropics twice on the voyage out, and cruised for months in the tropical zone, have still taken yellow fever when exposed in infected localities on the Pacific coast of this continent.

In miasmatic poison, time, as well as infected locality, is also requisite for this acclimating process. How is it to be secured in necessary amount and with any degree of certainty? I do not hesitate to reply, that it can be done by the proper employment of quinine.

Let us not fall into the delusion, however, of supposing that this is an invariably necessary agent; for it is a fact, that time, toleration of the poison, and acclimation, are not infrequently secured without any aid from the medical art. Some favoring circumstances, such as removal from the infected locality during hours of sleep; or short periods of exposure at long intervals; or some peculiar resisting force of constitution, may carry one along for months, and thus secure him a mild miasmatic attack. But quinine, when given in doses sufficiently large to interfere with the depressing influences of the miasmatic poison, will undoubtedly protract the period between the first exposure and the development of the first paroxysm so much, as to secure the constitutional change required for the modification of the febrile symptoms. High authorities have promulgated very confused ideas upon this very point.

For example, the United States Sanitary Commission have adopted the doctrine, that if quinine have not the effect of arresting the paroxysms, "it will always render the disease milder." Now, I believe it does so in an indirect way only, that is, by giving the exposed person time for acclimation, as above explained. I have never had reason to believe that the simple introduction of quinine into the system daily for an indefinite time, is followed by any such modification of the febrile paroxysms necessarily.

Were this the case, persons dosed with this drug for a time before their exposure to the miasmatic poison, would have a mild form of the fever whether they continued to take it after the exposure commenced or not.

I have no knowledge of any experimental observations which tend to establish any such doctrine as this.

My experience in this matter has thoroughly convinced me, that the law is, that the longer the quinine taken enables the person to escape the first miasmatic fever, the more will its paroxysms be modified, and the milder will the attack become. The converse of this would be, that whatever the quantity of quinine taken, should the fever notwithstanding come on early, no such amelioration of its character will be experienced; but it will be in every respect a true acclimating fever.

So uniformly did it result, that the person who—by reason of any of the favoring circumstances herein enumerated—passed a month or two in miasmatic exposure before suffering his first attack, had it in a more or less modified form, that when I saw a person newly arrived in the country, passing thirty or forty days' exposure without symptoms of fever, I could predict with almost absolute certainty that when his fever did come, it would be in a mild form.

Now, the indefinite protection of the person from miasmatic *infection*, and of course the power to postpone in like manner the first attack of fever, is unquestionably possessed by quinine, and this is what should be termed its *protective* action. I now come to the inquiry as to the amount of the medicine required to effect this result. My experience with quinine in the treatment of the developed miasmatic disease had taught me that doses too small to produce a sensible impression upon the nervous system, could not be relied upon to prevent the paroxysms. Why then should such small doses be expected to prevent infection? I could never see any reason for such an expectation, and therefore I applied the same principle to the protection from infection, that I had been accustomed to employ in the prevention of paroxysms. Hence, whether administered for the one object or the other, a sensible impression should be produced, and for the purpose of protecting from infection this impression should be continuously kept up during the hours of exposure.

Appreciable signs of the action of the drug are produced by from three to six grains. My usual first dose was four to five grains, and increased or diminished as seemed requisite in each case. I ascertained that once in about twelve hours was sufficiently frequent to repeat the dose as a rule, though some eliminate the drug completely in about eight hours; and, therefore, such persons should take their dose once in eight hours.*

Now, infection having been avoided by this continuous impression of quinine during the exposure, there seemed to me no reason for continuing its administration after the exposure ceased, and accordingly I so instructed the patients. The result was a uniform exemption from infection. The experiments whose results led me to these conclusions, though extending over a number of years, would have been less conclusive had not an occasional self-willed person declined to take the protective dose, on the ground that well people require no medicine. I will mention but a single case in illustration. A vessel arrived in the port of Aspinwall with a perfectly fresh crew, that being their first voyage to that harbor. Among them were three persons who refused to take the prescribed quinine. After remaining at the wharf about three weeks, the vessel sailed. These three persons, and these only, were taken ill of fever on their way to New York. All the rest of the crew had uninterrupted good health. So many similar cases occurred within my observation during my residence there, that I was compelled to accept the results witnessed as the effects of the measures adopted, and not mere coincidences. I did so, too, with a full understanding of the behavior of miasmatic poison upon a promiscuous population. I knew it to be possible, for I had often witnessed its demonstration, that some may expose themselves for weeks to miasmatic exhalations and yet go away perfectly well and remain so, without ever taking a grain of quinine or other medicine. On the other hand, I had seen persons seriously infected by a few hours' exposure only. While I am ready to admit that many of the persons to whom I gave the quinine would probably have escaped the fever without it, I fully believe that all of those obstinate ones who refused to take it, and suffered fever, would have been protected by it.

This fact of the great difference in susceptibility to miasmatic poison so frequently seen, is not sufficiently considered by most writers upon the uses of quinine, in making up the conclusions to which they have arrived. For example, the Sanitary Commission publishes the story, that seventy-seven persons went on an excursion up a river in Africa, and leaves us to infer that they were gone about twenty-four hours. They all took a dose of quinine when they started, and carried another dose to take at night, except one of the party. This one was the only one of the whole seventy and seven men who suffered fever subsequently. Now, I do not deny that this man may have been infected during that exposure, but if so, he certainly was a remarkably susceptible subject. In my belief, it is scarcely probable that another one of the whole party would have suffered from so slight an exposure, had they taken no quinine. The inference, therefore, that the other seventy-six men were protected by the quinine they took is by no means deducible.

Also the following notable sample of the extraordinary delusions that even physicians are occasionally led into. Thirty-two officers and men were exposed in the Rio Ponga for two days and two nights. They took four grains of quinine daily during the time. Four of the party subsequently suffered fever. On another occasion a party of thirty-four were similarly exposed for seven or eight days, taking a dose of quinine *every other day* only, during the time. Seventeen, or just half of this party, subsequently had *severe remittent fever*, notwithstanding their dose of quinine on alternate days, while twelve and a half per cent. of the former party fell sick after two days' exposure, though they took a daily dose.

No one with any knowledge of the natural history of miasmatic disease as manifested in the human subject can regard this account as affording the least evidence that the quinine given exercised any influence one way or the other. It is not at all probable that one of the whole party was protected by the medicine he took. The result is certainly much worse than the former similar Chagres exposure of so many thousands of our countrymen who took no medicine whatever. The old Isthmus transit used to occupy from one to four days, yet the persons who contracted the fever during it, never amounted to twelve and a half per cent. Obvious therefore as it is to me, that the quinine given in the cases here alluded to was nearly totally useless, my surprise at the conclusion to which the author of the report comes may be understood. He says, "it is not to be presumed that quinine will prevent the occurrence of fever in every case, but in a sufficient number to be of the utmost benefit, and the fever occurring in those who have employed it as a prophylactic is sure to be of little moment." Yet this reporter has just stated that fifty per cent. of his cases had *severe remittent fever* after exposure of one week.

These histories simply demonstrate what I have already declared to be the truth, viz., that there is a great difference in the matter of susceptibility to the impressions of miasm manifest in different individuals—some resisting them many days, as we see in the case of the thirty-four men, half of whom only became infected and suffered disease from a seven or eight day exposure. Others became thus infected in a day or two, and in a few *rare* cases I believe that a few hours' exposure will seriously infect them.

I need not urge the importance of a due consideration of all of these facts, in estimating the effect of the quinine administered in any given case—how much credit should be awarded to the drug, how much to fortuitous or sought circumstances, and how much to the unaided *vis medicatrix naturæ*.

* For further physiological information upon the point of the duration of the influence of quinine, I refer the reader to a Report of the results of experiments, by Dr. Bence Jones, published in the RECORD of Sept. 15, 1865; and to my Letter relating to the same, published in the RECORD of Oct. 15, 1866.

I believe that this point was weighed with due care during the investigations which convinced me that *quinine will protect from miasmatic infection.* This power conceded to it, then very naturally arises the query—*How long may we rely upon its protective powers?* This is a more difficult question to answer than the uninitiated, and even than some of those who have written upon quinine, seem to suppose. Few persons will submit to an interminable drugging, practised, as it must be, in an experiment of this character, while the subject is in perfect health, and on this account, chiefly, I have never been able to form a definite opinion in reply. But whatever the limit may be, I am convinced that we may rely upon it with confidence, for any period within sixty days, and this is long enough for any practical purpose. The various published reports touching the permanency of the influence of quinine, nearly all refer to its action as a preventive of paroxysms, and not as a protective from infection. Of this class was a case quoted by the Sanitary Commission, wherein a period of one hundred and forty days seemed to make no difference in the action of the drug. Though quoted as evidence of its permanent power, this case is worthless upon the point in question. This protective power is of the utmost utility to the transient resident who may desire to get off without carrying with him the poisonous impression which will eventually develop into disease. To this end, where the residence is not to extend beyond sixty days, I recommend that a continuous influence of the quinine be kept up during the whole time, if the exposure is constant, but to be omitted during any period that the person may be removed from the miasmatic atmosphere. Where the residence is to be longer, I can see no useful purpose in continuing to administer the medicine longer than about thirty days, because, as we have seen, a residence of thirty days and upwards in the locality, will have so modified the constitution that his febrile attacks will be of mild type, should they not be prevented by appropriate treatment, a very practicable thing to do. Whether, to secure this result, it is necessary to give sufficient quinine to constantly produce signs of its action or not, I am by no means certain. But as, short of this evident effect, there is clearly much doubt as to whether the medicine is exercising any influence or not, I think it a safe error, if error at all, to be thus far certain, and I therefore so recommend.

Summary: When the person is thrown into miasm, give him at once three to five grains of quinine—according to the effect—and repeat the dose once in *twelve* hours during the whole period of exposure, up to about thirty days in the permanent resident, and to sixty days if the person is not to remain longer than that in the impure atmosphere, and where there are peculiar reasons for desiring him to avoid subsequent miasmatic disease. It should not be lost sight of, that cases often occur wherein it will be necessary to repeat the dose once in eight hours in order to maintain the required influence of the medicine, the signs of which are to be carefully watched and maintained in all cases.

When exposure ceases the medicine is to be at once suspended.

The following additional deductions from the general summary of that memoir, may appear to you of sufficient interest to merit republication, viz. That removal from a miasmatic atmosphere for any twelve hours, especially during a night, is quite equivalent as a protective to one dose of quinine—it may be much more economical, and when practicable, is by far the most desirable protective measure.

That in all cases where this measure can be daily practised, it will unquestionably preserve the susceptibilities of the brain to the action of the medicine, for an indefinite and probably long period, and will thus serve indirectly as a most efficient protective.

That when continuous exposure is inevitable, there is no safety in attempting to protect from infection by the use of quinine for a longer time than two months, and as a general rule it is not advisable for longer than one month.

That ceasing its administration at the end of the first month, by the time the infection takes place and the premonitions appear, the susceptibilities to the medicine will have become so restored, that it will be practicable, generally, to prevent the paroxysms for long periods of time.

That by an observance of these principles, and by avoiding the causes of other diseases, most men, of even ordinary constitutions, can be kept in miasmatic localities for years in an efficient state of health.

N. Y., 232 West Thirty-fourth street.

INTRA-LARYNGEAL SURGERY,

AND TOPICAL MEDICATION OF THE UPPER AIR-PASSAGES.

By J. SOLIS COHEN, M.D.,

OF PHILADELPHIA.

No. 1.

Professor Czermak, the ingenious founder of laryngoscopy, though not himself a practising physician at the time, soon recognized the fact that the laryngoscope could be utilized for far more important purposes than that of the diagnosis of laryngeal disease; and using his mirror as a "guide to the operating hand," he boldly plunged a sound into the interior of a patient's larynx, and demonstrated a safe practice for the method of intra-laryngeal surgery, with visual confirmation of results. Herein, no one can claim participation in his honors.

It is now practicable to apply local treatment to the upper air-passages, in many instances, with as much precision as to the inner surface of the cheeks or nostrils, and the ingenuity of operators and cutlers has adapted to the purpose instruments of such configuration and mechanism, as permits of the performance of many delicate surgical operations, in the removal of neoplasms especially, under a great variety of form and seat of disease.

The employment of the laryngeal mirror for purposes of diagnosis, is an art comparatively easy of acquisition; but operations within the larynx and trachea by its aid, require considerable practice, if not a certain amount of peculiar adaptation in addition.

Certain general manœuvres are necessary for the proper introduction of every instrument, from a blunt probe to an exposed bistoury. The plan which the writer has found most useful in instructing his pupils, is to begin by holding the mirror over a plane surface, as for instance, the page before us; the paper representing the plane of the upper surface of the larynx, and the mirror being held an inch or more above it, at an inclination of about 45°. Then the student is directed, with the other hand, to take an ordinary probe, and keeping his attention upon the image of the spot he designs touching, to carry the probe towards the mirror until it is nearly in contact, and then to move it gently until a distinct view is obtained of its point, when, without losing sight of the end of the probe, it is to be directed towards the image of the spot selected, and to be slowly carried to it. A little practice will soon render him familiar with the direc-

tion necessary to be given to the probe to secure the desired movement. After this has been repeated sufficiently to familiarize the student with the proper method of following the reflex of his movements, so as to carry his instrument at will to the right or the left, in front or behind, the straight probe is changed for a curved one, such as would be suitable for introduction into the larynx, and the same exercises are repeated, a second person after a while designating the points which the student is to endeavor to touch. A triangular pasteboard tube of the size of the larynx, with certain marks upon its inner surface, is then substituted for the sheet of paper or printed page, and the mirror is then held above it, so as to reflect the image of the interior, and the exercises are repeated. The difficulty of touching a desired spot is now rather greater than before, and the student learns to raise the handle of his instrument, if he wishes to touch the anterior surface of the tube, and to depress it in order to carry the point of his instrument towards the posterior portion of the tube, as also the proper movement to the one side or the other.

After this, a papier-maché model of a larynx is employed as a means of exercise, and, finally, the method introduced by Tobold, which is to mount a recently excised larynx with the tongue, soft palate, etc., upon the rod supporting a skull, with the jaws separated, the œsophagus being fastened round the rod. If a recent larynx cannot be obtained, a wet preparation, or an artificial one is substituted.

After a certain degree of facility has been acquired in this way, it is necessary to learn how to manage the mirror and operating instrument at the same time with artificial light; and this is best done by suspending the model, or the mounted skull, within a box, with a small opening to represent the open mouth just in front and above the larynx, or model; then the light is to be thrown into the interior through the opening, and the manipulation proceeded with as before.

After the student has acquired considerable facility in placing the point of his instrument upon any desired spot, recognized solely by reflection in the mirror, it will require a great deal of patience and of practice to enable him to accomplish the same result upon a patient, in whom nervousness and the natural irritability of the structures will cause more or less movement of the parts, whose reflex must be followed promptly and with accuracy in order to ensure precision of movement. The results that reward perseverance seem all but incredible to those who are not familiar with the subject, or impressed in its favor.

The principal rule to be observed in these manipulations, be they what they may, is to carry the instrument well towards the mirror, until its point is visible in the image, and not to l se sight of the point during the operation. Very often the instrument will have to be withdrawn again and again before a favorable opportunity is presented for carrying it home; but with increased practice, the expert soon becomes able to succeed at almost every attempt.

We can, in this way, not only make local applications of a general nature, such as swabbing, syringing. etc.; but circumscribed ulcers can be cauterized; abscesses opened; tumors ligated, excised, or twisted off; granulations scarified; individual muscles galvanized; everything except dissection; and this without compromising the integrity of the healthy structures, any more than occurs under ordinary circumstances.

The instrument which it is proposed to place within the larynx, must be formed with a proper curve or angle. The angle most generally serviceable is one of 112°, but if it be a little greater or a little less, it will make no material difference. An angular instrument may be employed, if desired, but will occupy more space in the throat than if curved, and thus at times may be less serviceable. The laryngeal portion may be from an inch and a half to three inches in length, and the handle or stem from six to eight inches. Under certain circumstances, the ordinary form of the instrument may be conveniently departed from, in consequence of peculiar conformation of larynx, or where it is intended to operate upon the anterior or posterior wall of the tube; in the former instance, the angle may be more acute, and in the latter more obtuse; otherwise, the necessary depression or elevation of the hand, in order to reach the desired spot, will require the possession of a greater amount of skill.

The best method of managing the tongue, is for the patient to extrude it as far as possible, and then to hold the tip himself between his thumb and forefinger, so as to arrest the involuntary backward movement when an instrument is passed within the mouth, a cloth being interposed between the tip of the tongue and the fingers to prevent its slipping. Patients soon learn to hold the tongue properly and quietly, without grasping it. If it is absolutely necessary to employ a tongue depressor, an instrument should be selected which will reach well back to the base of the tongue, which is then to be forcibly depressed and drawn forwards, and the management of the tongue depressor should be entrusted to the patient. The less paraphernalia employed, however, the better. Tongue depressors, head rests, and laryngeal "*fixateurs*"—instruments attached to the patient's head, or to his jaws, and provided with a fork, which is to hold the laryngeal mirror in position—all produce more or less restraint on the part of the patient or operator, and their use is therefore to be avoided unless imperatively needed, an emergency which is, happily, of rare occurrence. When a patient is unable to maintain his head in a proper position without extraneous support, the best rest for it is the breast of a friend, or that of an assistant, who should place one hand upon the forehead. The writer sometimes employs Tobold's head rest, when an assistant is not within call. If the tongue is very fleshy or very unruly, a depressor may become indispensable. It is difficult to conceive of any case in which an instrument for holding the laryngeal mirror in position can be judiciously employed, for it would become spattered by cough, etc., necessitating frequent readjustment, which would prove exceedingly irksome and vexatious. If the operator require the use of both hands for instrumental purposes, the mirror can be managed by an assistant, or in many cases, and what would be far preferable, by the patient himself, who can often be taught to keep the mirror in position after it has been properly placed by the operator; and indeed some patients have learned by practice during protracted treatment, to introduce the mirror themselves, and place it at once in the desired position.

Light, patient, tongue, etc., being in proper adjustment, the mirror is introduced with the left hand, if the operation is to be performed with the right, or *vice versâ*, and with the other hand the instrument is to be passed well back into the pharynx and close to the mirror, until its point can be clearly discerned in the mirror, and avoiding contact with any of the structures; then, with the image in the laryngeal mirror, as "the guide to the operating hand," the point of the instrument is to be directed towards the desired spot, and, following the reflex, to be carried there promptly and quietly. The instrument should be taken in hand as if it were a pen, not as if it were a cart-whip, as too many are apt to hold it, and the fingers being extended

on the wrist, the laryngeal portion is to be carried over the tongue, until its approach is seen in the mirror. It is not always, even after long practice, that the actual contact of the instrument with the diseased spot can be seen in the mirror, for usually, and perhaps always, at a first application, spasmodic action ensues at the moment of contact; and very often the instrument, if not promptly withdrawn, will be caught by the epiglottis or by the base of the tongue, an occurrence which it is desirable to be able to avoid, although under certain circumstances, as when a general application is being made by means of a moistened sponge, the action may be advantageous, inasmuch as it compresses the sponge, and thereby secures the discharge of its fluid. Under these circumstances, the character of the contact is to be determined by the impression conveyed to the finger by the end of the instrument. As soon as practicable, which is as soon as the spasmodic action induced by the operation ceases, the parts are to be reëxamined in the ordinary manner, in order to judge of the success of the application, as well as to determine the necessity for its repetition in case of failure.

Patients soon become accustomed to the momentary contact of a foreign body against the laryngeal mucous membrane, but at the earlier interviews the distress is often extreme; there is a great deal of spasm, with choking sensation and expectoration, while the sense of constriction and dread of suffocation sometimes remain for several minutes. It is the same as when a foreign body has been removed from the conjunctival mucous membrane, the sensation of its presence remains for some time; and, from a similar cause, patients will "feel the sponge in the throat" after its withdrawal, and this will keep up the feeling of impending suffocation, so that they will sometimes throw themselves from side to side, walk about the room, approach the window to get a breath of air, etc., and occasionally exhibit an amount of distress piteous to witness. With each repetition, however, the sensibility of the parts decreases, until, after a while, the application will be followed by a mere clearing of the throat. In the earlier applications, too, the effect will be to induce active congestion of the parts with increased secretion, which will be followed by a sense of roughness, dryness, or burning, in greater or less degree, continuing from fifteen minutes to several hours. As the applications are repeated, these effects, too, gradually diminish in intensity. The swallowing of cold water will often materially alleviate this distress, when it is severe; and if it continues for some time, the inhalation of an anodyne solution or vapor will overcome the irritation.

Very often a skilful operator can succeed in making a successful application at the first interview with his patient, but with those who are less practised, and in all cases of extreme irritability of structures, a certain amount of preparatory manipulation becomes requisite. The plans recommended in the writer's recent articles on laryngoscopy, *see Vol. I., p.* 359 (to which he may add that the hypodermic injections of anodyne solutions has not produced very satisfactory results), may be employed. The best method is the contact of some extraneous body. I often show a patient how to pass an instrument into his own larynx, a probang with a small sponge attached, for instance, and direct him to moisten a sponge with water, and insert it into the larynx two or three times a day, until the contact of the instrument can be borne without flinching. This practice is necessary at times, preparatory to the employment of cutting instruments; less so when cauterization or general applications are to be instituted. Very often the epiglottis is more irritable than the interior of the larynx, and to overcome this the best plan is for the operator to pass his finger behind the patient's epiglottis, and pull it forward several times, and then to teach the patient how to perform the manœuvre himself, and direct him to repeat it occasionally at intervals during the day. Then he may be provided with an extension thimble, with a good, broad, blunt end, and insert that several times a day. When the epiglottis is very much depressed, the patient must pull it forward frequently, so as to induce it to assume a more erect position. A patient can be taught to raise the epiglottis with one fore-finger, and then to pass a sponge probang along the back of the finger down into the larynx. By this, or some similar method, the sensibility of the part will be gradually subdued, and it is surprising sometimes how soon the irritability is overcome. And here we are led to an important practical observation, which is, that a patient who has been suffering a long time with severe disease, even when of nervous temperament, will learn to control his sensations promptly, while one whose trouble is trivial or imaginary, will require longer tuition and preliminary manipulation. Again, it will be noticed, that a patient who may be exceedingly docile, and may coöperate well with his physician during the earlier interviews, will sometimes become less tolerant of manipulation as relief is being obtained.

Where obstinate depression of the epiglottis precludes the convenient introduction of an instrument, it will have to be forcibly raised by means of properly curved forceps, hooks, or pincettes, of which that of Von-Bruns (*described at page* 349, *Vol. I., of* THE MEDICAL RECORD) is the best.

Certain precautions are necessary to success in limiting a local application to certain portions of structures, and in order to gain access to others; and for this purpose we avail ourselves of the physiological effect of voluntary movement. Thus, if we want to medicate the floor of the glottis, or prevent any of the material used from entering the trachea and lower laryngeal cavity, we direct the patient to emit a vocal sound, which of course closes the glottis; if, on the contrary, we desire the instrument to enter the lower laryngeal cavity, or penetrate into the trachea, we direct a deep inspiration to be taken which opens the glottis and permits the passage of the instrument between its lips; if we wish to make an application to the laryngeal surface of the epiglottis, or to the anterior portion of the vocal cords, ventricular bands, etc, we direct the forcible extension of the tongue, and the utterance of a high note or an ironical laugh, in order to expose these structures more fully; if we wish to touch a spot upon the lingual face of the epiglottis, or in the glotto-epiglottic sinuses, or upon the base of the tongue, we allow the base of the tongue to remain in a more natural position, or cause it to be protruded in such a way as will not raise the epiglottis to its erect position, etc. Then, again, the preliminary movements of retching, swallowing, coughing, etc., will raise the entire larynx, and bring the structures within nearer reach of an instrument.

With these general remarks, we are able to enter upon the special consideration of our subject.

AGASSIZ AND AMERICAN ARCHÆOLOGY.—It is rumored that Professor Agassiz and the senior class of Harvard University contemplate a visit to southern Ohio, for the purpose of a scientific investigation of the antiquities—tumuli, fortifications, and other remains—of an extinct race, in which it so greatly abounds.

CONSUMPTION OF CONFECTIONERY IN PARIS.—According to the Parisian Chamber of Commerce about eleven millions of francs were spent in bonbons last year.

ANAPHRODISIA.

TRANSLATED FROM THE FRENCH OF M. AMBROISE TARDIEN DE L'HOPITAL LA ROBOISIÈRE, PARIS.

By WM. MASON TURNER, M.D.

PHILADELPHIA.

The name *Anaphrodisia* has been given to the inertia of the genital organs, and to the enervation or the abolition of the genital functions.

It is not necessary to confound anaphrodisia with impotence (*agénésie*) and sterility (*aphorie*), which in men and women indicate a total impossibility of the perfect accomplishment of the generative act, and the reproduction of the species. Anaphrodisia is simply one of the forms—one of the sub-divisions of impotence. This can, in fact, depend as well on a mechanical difficulty in the emission of the sperm, or on a defective ejaculation; and in women, on a faulty organic conformation, or on a menstrual derangement, as on an irritable nervous atony, and on a deficiency in the generative power.

Anaphrodisia in man is ordinarily characterized by its slowness, defect in energy, and later by the absolute impossibility of erection of the penis, accompanied in the beginning by premature emissions, which are provoked by the slightest attempt at coitus. The spermatic secretion, and oftener still the venereal desires and exhilarations which are its prelude, gradually diminish, and finally become null. Among females, anaphrodisia is infinitely more rare, and is very difficult to determine, on account of a somewhat passive *rôle* to which the sex is often reduced. For the rest, it consists in a particular insensibility, a veritable atony of the genital organs, and an absence, more or less complete, of the *needs* and *pleasures* of animal love.

Anaphrodisia affords a great number of varieties, in regard to its march and the causes which produce it. Without referring to that which results physiologically from increasing age, and which can otherwise be retarded or advanced by special circumstances inherent to the constitution, anaphrodisia can be in some degree *congenital*, and dependent upon an original constitutional vice. Subjects who are infected, have generally a peculiar physiognomy. Their natures are effeminate, lymphatic; their forms rounded, sometimes amounting to *embonpoint;* the capillary system is meagre, or wholly wanting, especially in the neighborhood of the sexual organs; the voice is shrill and piercing, the genitals are but slightly developed, resembling atrophy; in women the breasts are scarcely formed, and the menstrual flux scanty; the character, apathetic and without energy.

In other cases, anaphrodisia is *acquired* and prematurely determined by venereal excesses commenced before age, and which have early enfeebled the generative system and the entire constitution by onanism. Sometimes, on the contrary, by an absolute abstinence, and a default in the rightful use of the genital organs, or again by an excessive and habitual tension of mind by exclusive pre-occupations, which lead in their train to ideas of ambition, to speculations in money, and to devotion to science.

Finally, anaphrodisia can be simply transient, and be produced by a too great abuse of the pleasures of love, by the enfeebled state which follows a serious illness of long duration, by the accidental and immoderate use of spirituous liquors, drunkenness, and the excesses of the table. It likewise is due to certain moral impressions, which, by a singular contrast, instantaneously paralyze every species of genital power in men. Such are, especially, excessive keenness of desire, timidity, distrust of one's self, and an unforeseen distraction in the act of coitus.

That which we have spoken applies exclusively to *essential* anaphrodisia; and we ought to add that this affection is often nothing more than a *symptom* which is observed at the beginning of brain derangements, in diseases of the spinal marrow, and in paraplegias, of which it is one of the first and best premonitory signs. It is met with likewise in diabetes, in different cachexias, in severe leucorrhœas, in certain rebellious gastralgias, and in asphyxia from the fumes of charcoal, after each of which it lasts for a certain time.

The treatment of anaphrodisia is necessarily subordinated to the different causes which we have enumerated. If it be often beyond the resources of our art, as when, for example, it is congenital, or when indicated by an anticipated old age, it is not always the same, in cases where the atony of the genital organs is recent, or where the disease is attributable to a cause which can be efficaciously combated. A tonic regimen, cold affusions, lotions, or douches followed by frictions on the vertebral column, on the organs themselves; and sulphuretted mineral waters, are the means which guarantee most success. It is best likewise to add the preparations of nux vomica, the action of which (continued with prudence) produces often the most brilliant results (*Trousseau*). We must count less on cantharides, phosphorus, and the numerous aphrodisiac remedies, which are so dangerous, and generally so little to be relied on, that their employment cannot be sustained.

Original Lectures.

EXTIRPATION OF THE UTERUS BY MISTAKE FOR OVARIAN TUMOR:

BEING REMARKS MADE UPON THE PRESENTATION OF THE SPECIMEN TO THE N. Y. PATHOLOGICAL SOCIETY, JUNE 27, 1867.

By E. KRACKOWIZER, M.D.

Mr. President—This is the body of a uterus, in the walls of which is imbedded a large fibroma, which was removed by mistake for an ovarian tumor; at least I ought to say that I only became aware that it was a uterine tumor when it was too late to arrest the operation.

The woman from whom it was taken was forty-eight years of age. She had been delivered when she was twenty years of age of a healthy child, and from that time she menstruated regularly. She did not marry, however, until she was thirty-five years old, and was without issue for four years, when her husband died of consumption. She remained a widow three years, and married again eight years ago, no children, however, being born. She was always in most excellent health, and menstruated regularly up to the time of the operation. About two years ago she felt that her health began to get somewhat impaired; she could not describe in what manner, save that she did not have her previous vigor and activity, and that her appetite became impaired, and that it seemed to her more difficult to attend to the duties of her household than heretofore. One year ago a swelling in the lower part of the abdomen appeared; it did not increase, however, to any considerable degree, or with any marked rapidity, and its presence only occasioned her uneasiness.

I saw her for the first time about six weeks ago, and made an examination into her case. The tumor, which was about the size of a child's head two years old, was

felt occupying the lower part of the abdomen. It was smooth, elastic, painless on pressure, and movable from side to side. On making a vaginal examination, it was found that the mass bore down behind the symphysis pubis, and had crowded the uterus backward. The os was felt on the posterior part of the tumor. A uterine sound entered with great facility to the depth of two inches and a half behind the tumor. When the sound was grasped by one hand and the tumor held with the other, it seemed to move independently; I therefore concluded that I had a simple ovarian tumor to deal with, and that the uterus was normal and unconnected with it. I supposed that the pedicle was a pretty short one. No examination per rectum was made.

The condition of things was explained to the woman. After stating to her the chances which she had if the tumor were left alone, or if the operation were undertaken, and after sufficient time had been given her for deliberation, she most decidedly preferred to have a radical operation undertaken. I then called in Dr. Kammerer, to get his advice in the matter. He made an examination, and corroborated my opinion in every respect, except that he thought that the tumor originated from the left side, while I was of the opinion that it came from the right side.

The day before yesterday the operation was made. After chloroform was administered, an incision was made midway between the umbilicus and symphysis pubis to the extent of four inches, and the tumor was presented. I must state that at the previous examinations, never having felt any fluctuation, I was of the opinion that the walls of the cyst were very thick. When the peritoneal cavity was opened sufficiently wide so as to introduce the hand, it was found that the omentum was adherent in several spots on the surface of the tumor. On the left side a band was detected, with a somewhat cylindrical yielding mass in it, which seemed to be the dilated Fallopian tube of the left side. On bringing the hand between the promontory and the tumor, the mass was found to be connected most intimately with the cervix uteri. Before that was done, however, a trocar was plunged into the mass, and on introducing the trocar I became aware that I had to deal with a solid tumor, as no fluid escaped and the end of the trocar was firmly held fast. A great deal of venous oozing took place from this spot. Between the promontory of the sacrum and posterior aspect of the tumor I could feel plainly the left ovary, and I could also ascertain that the mass was a continuation of the cervix uteri. The uterine sound was passed to the depth of two inches and a half; it was also evident that the tumor was springing from the lower portion of the body of the uterus, which a little above the inner os was swelling out rapidly into a globular tumor.

The question then arose, whether it was better to desist from the operation or go on. In rapidly canvassing the chances which this poor woman had, and which were very slim indeed, it was thought best to proceed. Inasmuch as the tumor had been wounded and hæmorrhage had occurred, the risk of peritonitis was very great; and, further, if it were possible that peritonitis would not follow, the wound itself would give her no more chance if the mass were allowed to remain than if it were taken away. I therefore determined to remove the whole mass. I ligated both Fallopian tubes, and of course part of the broad ligament, and after the ligation of these bands, and when the tumor became more movable, I lifted it out of the abdominal cavity, pulling it well up above the symphysis pubis, so that the neck of the tumor could be seen and felt. I then carried the chain of the écraseur around it, and proceeded very slowly to close it. I was fully three-quarters of an hour in accomplishing this, in the fear that by proceeding more rapidly hæmorrhage might ensue. After the chain had worked through the rest of the womb, that is, the cervix being still upon the stretch above the symphysis, no hæmorrhage was visible, but as soon as the stump was fairly liberated the whole field of the operation was deluged with blood. The stump was again grasped with the forceps, and both uterine arteries were secured, but the uterine veins, as well as several sinuses in the cervix itself, continued to pour forth blood, and these with great difficulty were at length secured. For greater security against accident, a silver wire was then twisted around the end of the stump, and the ends brought out of the wound.

The loss of blood was considerable, but the pulse did not indicate an anæmic condition of the body.

The operation took fully two hours and a half. The wound was closed with five silver-wire sutures. A hypodermic injection of Magendie's solution was then administered, and, as the result, she slept quietly an hour, after which she awoke. I saw her about seven o'clock in the evening, and she was then in a tolerably comfortable condition. There was, however, a good deal of tenderness on the right side of the umbilicus on the slightest touch, otherwise the abdomen was not tender. Four drops of Magendie's solution were given every hour during the night. After midnight she became restless and commenced to vomit. She vomited several times after I saw her next morning, about seven o'clock. It was then very evident that peritonitis was extending rapidly. I made a hypodermic injection again, and during my absence large doses of Magendie were given. About one o'clock in the afternoon she was in a sinking condition, there being no pulse at the wrists, and at four o'clock she died.

No post-mortem examination was made, and I do not believe that had it been done much more light would have been thrown on the case, so short a period of time having elapsed from the operation to the death.

On introducing a catheter or sound into the cavity of the womb, it will be seen that the uterine canal reaches up a good deal higher than at the original examination. If I had not had my mind preoccupied with the existence of an ovarian tumor, and if, on account of some obstacle, the probe had not been arrested at just the depth of two and a half inches, I should have been prevented from making this deplorable mistake. I suppose that the sound was arrested by some projection into the cavity of the uterus, and possibly I did not make effort enough to get it beyond that point.

The specimen has been incised by a longitudinal cut, and it will be seen that a large fibroma is embedded in the walls of the uterus, and that this mass has nothing to do with the cavity itself.

I must mention that in the progress of the operation, when the chain of the écraseur was tightened, the centre of the mass seemed to be occupied by a hard, irregular mass, and that there was a looseness of the investing walls noticeable. In a similar case, if I should be caught in such a tight place, I would from such a symptom be led to modify the operation; that is, instead of removing the uterus, and giving the patient an almost infinitesimal chance, I would incise the walls of the tumor and enucleate the mass. Hæmorrhage would have occurred, but it would not have been difficult to secure the bleeding points as they in turn showed themselves. A very loose pouch would, of course, remain, but that to a great extent could be resected, and the edges in apposition secured by sutures. The mistake that I made in supposing that the tumor

was movable independently from the uterus is explained by the fact that the womb, just at a distance of two and a half inches from the os externum expanding rapidly to a globular mass, would rock from one side to the other when moved by the hands through the abdominal walls, as it were, on the extremity of the uterine sound introduced to the depth of normal length of a healthy uterus without imparting this motion to the sound itself.

Progress of Medical Science.

ERGOT IN SPOTTED FEVER.—A well-marked case of cerebro-spinal meningitis, which resulted in complete recovery, after running a course of 164 days, is reported in the *Boston Medical and Surgical Journal*, July 18th, 1867, in the treatment of which ergot seemed to have more influence in controlling the symptoms directly referred to the nervous centres than any other remedy employed. The wine was used in doses ranging from 20 to 40 minims three or four times daily.

EXTIRPATION OF NAIL OF THUMB UNDER ANÆSTHESIA BY COLD.—Dr. John Parsons, of Mt. Pleasant, Kansas, reports the following case in which local anæsthesia was produced by the mixture of snow and salt:

"Mrs. B., who had been treated by charlatans with salves, etc., for the past four months, without any benefit, lately applied for treatment, and I decided to remove the partly detached nail of the right thumb. As she dreaded the pain of the operation, and also taking chloroform and ether, I concluded to try *freezing* with snow and salt. In two minutes, the thumb being insensible to pain, I quickly extirpated the nail. The thumb was then thawed in water, and then simply dressed. Seven days after the operation it was healing rapidly, and a new nail had appeared."—*Am. Jour. Med. Sciences.*

BROMIDE OF POTASSIUM IN PUERPERAL CONVULSIONS.—The following interesting case is reported in the *Am. Journal of Med. Sciences*, by Dr. Chas. C. Shoyer, of Leavenworth, Kansas. He thinks it the first in which the bromide of potassium has been used in the treatment of puerperal convulsions, and asks that the drug may have a further trial.

Mrs. H., aged 18, primipara, was seized April 30th, with a severe gastric pain, which Dr. S. at his first visit thought was caused by the inception of labor; at a second visit, however, the true seat was recognized, and it was easily controlled by small doses of morphia with co. spts. lavender. During the night she vomited and had two stools from a half ounce of ol. ricini; she had a craving appetite, and ate largely of meat, bread, etc., swallowing without mastication, as the event proved; this continued throughout the night, and in the morning of May 1st, she got up at 7 A.M., for the purpose of eating again, but fell to the floor fainting; upon being placed in bed she had a series of violent convulsions. When seen at eight o'clock she was strongly convulsed, breathing stertorously, pupils insensible to light, teeth firmly fixed, and frothing at the mouth.

Five drops of ol. tiglii were given in the course of an hour without any effect. Chloroform was found to quiet the convulsions only during its administration. Dr. S. having ascertained that the child was dead, now punctured the membranes, with a view to inducing labor. In a short time she began to vomit, throwing up large pieces of bread, meat, and other food. She now became quiet for a short time, during which a purgative mixture was exhibited, which was followed by three copious evacuations, voided in the bed, the patient being unconscious. After this she was quiet for nearly three hours, but the pains of labor setting in about 5 P.M., she had several convulsions in rapid succession. Upon consultation it was determined to give the bromide of potassium in fifteen grain doses hourly, and to be governed by its effects. From the time of its first administration to the end of labor, a period of 21½ hours, she did not have another convulsion. The bromide was given five hours successively, and then at greater intervals, as the stertor had ceased, and she was somnolent; towards the end of labor the intervals were four hours.

The child was born at 2½ P.M. of the 2d, was about 8½ months old, and had been some days dead, as the epidermis was peeling. She took in all 2½ drachms of bromide during 19½ hours. She remained somnolent until the morning of the 3d, and then awakened as from a prolonged slumber, having no recollection of the past, not even that she had given birth to a child. A specimen of urine was examined 30 hours after confinement, and found free from albumen.

THE OPHTHALMOSCOPE AND THE PHYSICIAN.—Dr. J. V. Solomon, of Birmingham, in a late issue of the *British Medical Journal*, makes the following remarks:

I find all impediment to focussing of the fundus to be at once overcome if the student suspend the power of accommodation of his right eye by the application of a four-grain solution of atropia (*British Pharmacopœia*) half an hour before making his ophthalmoscopic examination.

This being done, and the iris of the patient fully dilated, he has only, after having observed the usual rules laid down in ophthalmic works, to gently move his head a little backward or forward, as the case may be, and a complete picture of the optic nerve and its surroundings starts into view.

The physician will do well to select a case of extreme short sight, atrophy of the optic nerve, or a light blue normal eye, for his first experiment, and continue his observations every day. By the time the action of the atropia has subsided, he will, if endowed with good vision and some manual tact, find himself master of a step in ophthalmic investigation which had hitherto been considered by him as insurmountable.

UNUSUALLY RAPID ACTION OF THE HEART.—Dr. Richard Payne Cotton reports a case in the *British Medical Journal* of unusual rapidity in the heart's action. The patient was a tailor, 42 years of age, who from time to time had been subject to paroxysms of palpitation. These were in each case preceded by loss of appetite, acidity, and disordered stomach, with constipation, the rapid action of the heart following immediately upon a sensation of faintness and short breathing. When called to see the patient in one of these attacks, the physician found him anxious, but not otherwise seriously distressed; his breathing was short, hurried, and irregular, varying from thirty to forty in a minute. The pulse was too rapid to be depended on; but the beating of the heart was distinct, regular, free from murmur, and *two hundred and thirty-two* per minute. Immediately over the semilunar valves both sounds could be clearly distinguished, scarcely differing from each other, and closely resembling the peculiar "tic-tac" beats of the fœtal heart; but in every other part of the cardiac region a single and abrupt sound only could be heard. No valvular murmur could anywhere be detected, neither was there any visible pulsation in any of the larger arteries; but the jugular veins, as well as the larger veins at the bend of the arms, could be distinctly seen to pulsate. Subsequently the sphygmograph was employed, and the tracings, which were remarkably regular, representing mere ripples, proved the pulsations at that time to equal 220 per minute. The

attack passed off, as did all previous ones, suddenly. The treatment consisted first in the use of antacids and stimulants, during the action of which a considerable quantity of tape-worm was expelled. After a short time the tincture of digitalis was given in doses from 10 to 15 minims three times a day; and it was during the use of this medicine that the heart returned to its normal pulsation—that of 70 per minute. Notwithstanding the immense rapidity of the action of the heart during the paroxysms, the patient was not considered at any time in danger. In conclusion the reporter remarks:—"In the case before us, either one of two conditions may have existed. The presence of the tape-worm may have produced a reflex irritation of the heart itself; or the acidity and dyspepsia under which the patient invariably suffered at the period of his attacks may, by giving rise to an abnormal condition of the blood, have provoked the heart to its rapid and premature contractions; and it is even possible that these two conditions may have coexisted. I will not, however, insist upon such an explanation; but, in the absence of even the slightest indication of brain or spinal affection, or indeed, of any unusual amount of general nervous sensibility in our patient, I am at a loss for any other."

Aids to Digestion.—Dr. Marcet, in a pamphlet "*On a new process for preparing meat for weak stomachs*," recommends the use of hydrochloric acid and pepsin as solvents for the cooked flesh previous to being taken for food. He is of the opinion that by this means many irritable stomachs could be enabled to dispose of a certain amount of animal food which under other circumstances could not be digested at all. He gives careful directions for preparing the food.

Phenic Acid for Caries.—Phenic acid is strongly recommended in dental caries by two French dentists, MM. Prest and Victor. They assert that they can obtain a cure in nine cases out of ten, without resorting to extraction.

Action of Sulphuretted Hydrogen on the Blood.—Herren Kauffmann and Rosenthal confirm the observations on the action of sulphuretted hydrogen gas upon the blood, already made by Herr Hoppe Segler. They say that the toxication of sulphuretted hydrogen is simply asphyxia. In cases of poisoning by this gas, the treatment is to introduce oxygen into the blood by artificial respiration, and there is hope of recovery as long as the heart acts.—*Archiv für Anatomie.*

Cervical Ribs.—L. Stieda, of Dorpat, describes the case of a woman, aged 30, in whom a pair of cervical ribs sprang from the seventh cervical vertebra. Except that the left cervical rib was ossified to its vertebra, whilst the right was articulated to it by a movable joint, both ribs closely resembled each other. In each a head, neck, tubercle, and body were found; the anterior end of the body was pointed and connected by a ligament to a plate of cartilage attached to the anterior end of the first thoracic rib. The subclavian arteries had been removed, so that Stieda could not determine their relations. The thoracic vertebræ and ribs, and the lumbar vertebræ, were normal in number. The paper concludes with a brief historical account of the cases previously recorded.—*Virchow's Archives*, 1866, *and British Med. Jour.*

Broadbent's Treatment of Cancer by the Injection of Acetic Acid.—Recent trials of the method of Dr. Broadbent in the treatment of cancerous tumors by the injection into their substance of acetic acid, in the Cancer Hospital, have resulted negatively. The tumors, instead of shrivelling in size, have been found to enlarge, and to take an inflammatory action. In one or two instances in which the method has been employed in this city the same unpleasant effects ensued.

Opium in Therapeutics.—The practice of physicians in America and in Great Britain, if not elsewhere, has changed very much in regard to the use of opium in fevers and some other forms of disease, within the last twenty or thirty years. Some remarks of Dr. Allbutt on this subject, in *Ranking's Abstract*, referring to the use of this remedy in the Leeds (Eng.) Fever Hospital, so entirely accord with the results of our own experience, that we take the liberty of commending them to such of our readers as may still entertain something of the old prejudice: "One year ago," says Dr. Allbutt, "I looked upon opium in fever with much suspicion, granting its occasional value alone, and greatly restricting its use. Gradually my fear of the restlessness overpowered my fear of the opium, and I have now ceased to regard the latter with any great apprehension. Continually I have witnessed the terrible havoc which a night's tossing makes in a little reserve of strength. Two such nights reduce it to a most precarious level, and few patients outlive three. On the other hand, though I and my assistants have been for six months giving morphia at all stages of the fever to combat sleeplessness, I have never yet seen mischief result. I have never seen the power of taking food suspended by it, or the oppression increased. On the contrary, I have continually seen with pleasure how, on the morning after opium has brought sleep, even during the first few days of the disease, the tongue has become moister, the headache less, and the countenance more open. The sleep of an opiate is better than no sleep. Camphor is also a great favorite of ours. We find, on the whole, that no medicine equals it in the low delirium often connected with feeble heart. We combine it with opium in low delirium accompanied with sleeples-ness. Perhaps, however, the most striking in its immediate effects, of all the medicines which we have used, is that which we familiarly call *Graves' Medicine*. The combination of antimony and opium in the wild delirium of fever is advised by Graves in a well-known passage of the *Clinical Medicine*, and a marvellous one it is. Half a grain of morphia, with one-third or half a grain of tartar emetic, with repetition of half the dose if necessary, will bring quietness and sleep to a patient who, an hour or two before, was a raging maniac." We do not exactly agree with Dr. A. that the power of taking food is never suspended by the remedy. But this is a small matter. The distinction between the grades of delirium is important, the combination with camphor being adapted to the low form, and the antimony to the wild and sthenic form.—*Pacific Med. and Surg. Journal.*

Beef Curing by Venous Injection is practised by a firm at Corpus Christi, Texas, according to report, with perfect success. The blood is withdrawn by tapping the right ventricle of the heart, the animal having been stunned; after which the veins are forcibly injected with brine, through a hose, the nozzle of which is tightly inserted in an orifice in the left ventricle, while the orifice in the right ventricle is closed. After filling, the right ventricle is opened, and allowed, under a continued pressure of brine, to run clear of the remaining blood. On making an incision at any point in the carcass, the brine spirts out the same as blood from the living animal, only with greater force. Even the hide is perfectly salted, and the carcass can be kept or transported whole as it stands, or skinned, cut up, and packed, with perfect safety from decomposition.—*St. Louis Med. Reporter.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, September 1, 1867.

THE TRUE NOBILITY OF THE MEDICAL PROFESSION.

A DISTINGUISHED professor once said, that "if all the medicine in the world (with a few exceptions) were cast into the sea, it would be the better for mankind and the worse for the fishes." His other utterances also on matters pertaining to medical practice, sparkling though they be with wit and brilliant with antithesis, can hardly be said to be orthodox, for having thus frequently made out his brethren as fools or hypocrites, our autocrat says that he has looked in vain for a wicked physician to serve as a character in a story. Here again we should be glad if in our kaleidoscopic view of the great and good among us, there were not obtruded the dark shapeless bodies of those who dishonor us by evil practices, covered up with the usual cant about the nobility of the profession. This cant is, indeed, a very common thing with us. If we were to believe the words of physicians themselves, as uttered in valedictory addresses, obituary notices, editorials in medical journals, our profession ennobles all upon whom its mantle falls. That there may be an intrinsic nobility in our calling, we are ready to admit; yet the nobility consists not so much in the nature of the work among the sick and suffering, as in the manner in which that work is done. There are some aspects of our profession in which it is a trade, and an honest one too, entitled to all the respect given a skilful and honest worker in any chosen calling, but no more. For instance, all-night attendance upon a very sick patient, with a handsome fee looming up in the future, may or may not be a philanthropic act, only so far as the actuating principle be founded on a correct motive. In other words, much depends on the spirit with which the work is done. Mutual admiration on the part of physicians, it seems to us, is a little overdone. We are not accustomed to hear the men of other professions indiscriminately laud their calling. Since we have voluntarily chosen our work, this laudation of the profession by implication praises us. As after all we get our living, in most instances, by it, and avowedly practise it for money, this sort of excessive talk about philanthropy seems in doubtful taste. Let us set about to reform the profession. Let us discountenance the evil practices, which in so many instances spring from their toleration, by those who should be the very ones to exemplify the nobility of the profession of medicine.

"A stream cannot rise higher than its fountain," and until our medical schools make some inquiries as to the moral and mental qualifications of the candidates for matriculation and graduation, the medical profession will be far from being in that fanciful condition which cannot furnish a wicked character for a novel. As we have often said in these columns, impliedly at all events, there is no qualification now required to enter a medical college, except the pecuniary ability to pay one hundred and forty dollars per annum. On graduating, no questions whatever need be *legally* asked, except "have you paid for your tickets, studied three years, and passed your examination?" As a result of this beautiful and noble system, is it any wonder that some men who graduate at respectable colleges, immediately rush into all sorts of deluding practices, among which that of homœopathy may be mentioned? In such a condition of the market—where the demand for character, much less for reputation, is so slight, can we complain that the supply is in proportion? We intend never to leave this subject, until reform has begun at the head of our profession—until medical schools cease to display so largely the money-making object, which, in the end, cannot but tend, by the number of unworthy ones admitted to our ranks, to lower so materially that high standard of excellence for which we are all naturally eager. While therefore, we may be reminded that "it is an evil bird which fouls its own nest," at the same time, without even challenging for admiration the acts of the truly noble men in the profession, we may be consoled with the reflection that the memory of the great army of Esculapian soldiers, whose names shall ever be honored so long as science has its votaries or truth its disciples, presents themes broad and ample enough in scope, for the most craving eulogist. Let us ask then, in view of the indiscriminate laudation which is heaped upon our calling by medical men themselves, how can we do otherwise than raise the notes of warning, lest our junior practitioners hug the delusive idea that an entrance into the profession has of itself ennobled them.

Individual self-sacrificing work, not alone for a living, but for the luxury of doing good, done in the same spirit for both rich and poor, and purity of life and heart, —these will ennoble us. But when we practise in this way, let us leave our encomiums to others.

THE organization of a medico-legal society in this city is a feature worthy of notice. Its members belong to the medical and legal professions, and its object is the discussion of all matters pertaining to forensic medicine. That the workings of such a society cannot

but be productive of benefit to both parties, no one can doubt. A vast loss of time in court, an amicable instead of the usual rancorous feeling between the lawyer and his medical witness, and the elimination of many practical truths, must result from a free discussion between the gentlemen of the two professions on a proper subject of inquiry. The plan of the society embraces the selection and discussion of a certain subject at each meeting.

As one great source of knowledge in legal medicine is from the examination of dead bodies, it further provides that every medical member shall use his best efforts to increase the practice, in his profession, of making such examinations, and stand pledged at all times to conduct an autopsy for any physician who may request such service. A report to the society is required from the member making such an examination, and, if possible, its illustration by diseased or injured parts taken from the body.

We should be glad to hear of similar organizations elsewhere.

The new Quarantine Station at West Bank, in the Lower Bay, has not reached that state of forwardness, which, when the contract was awarded, the public had a right to expect. It will be remembered that the works were to cover an area of about two acres, and were to be constructed of solid hewn timber bound in a species of net or lattice-work, and that these cribs were to rise some eight or ten feet above high-water mark. The two cribs now in position have withstood the unusually violent winds and seas of last winter and spring, and are thought by experts, proof against tests still more severe. Mr. Swift has, however, failed in making the requisite progress within the time specified in his contract, since the superincumbent structure is not yet *all* above high-water mark, and until such be the case, the Commissioners of Quarantine decline to pay down any instalments in liquidation of expenses thus far incurred.

We would call the attention of those of our brethren who may be interested in the progress of pharmacy to the coming meeting of the American Pharmaceutical Association in the University Building, on the 10th instant.

We have every reason to believe that the matters to be discussed will be of paramount interest, not only to the pharmaceutist but to the medical practitioner. A new feature will be introduced in the shape of "an exhibition of objects relating to pharmacy," which will be open for inspection for four days, dating from the opening of the session. For the sake of utilization the Association have adopted a programme, which calls for the following articles:

(1.) Chemical apparatus, including those for pharmaceutical processes. This includes apparatus and utensils for evaporation, distillation, percolation, filtration, etc., and analytical apparatus of all kinds.

(2.) Microscopes, microscopical apparatus and objects.

(3.) Apparatus used for remedial purposes, as galvanic and electro-magnetic machines, enemas, surgical appliances, etc.

(4.) Glassware, adapted for the wants of the apothecary.

(5.) Scales and weights, for chemical and store purposes.

(6.) India-rubber goods, for pharmaceutical, chemical, or remedial purposes.

(7.) Improved dispensing appliances, as bottles, boxes for pills and powders, labels, protection against mistakes by pharmaceutist or patient, etc.

(8.) Medicines newly introduced or proposed for use.

(9.) Mineral waters and apparatus, including natural and artificial medicinal waters, and apparatus for making and dispensing them.

(10.) Specimens of chemicals, drugs, pharmaceutical preparations, as also botanical specimens.

(11.) Illustrations of adulterations, and the means of detecting them.

(12.) Improved dietetic preparations.

(13.) Books relating to pharmacy or collateral sciences.

(14.) Historical relics having an interest in connection with pharmacy or its cultivators, as portraits, photographs, autographs, etc.

(15.) Any improvements in branches connected with pharmacy, not included in above.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, May 24, 1867.

(Continued from page 284.)

GANGRENE OF LEG BY EMBOLUS, AMPUTATION ETC.

Dr. Sands presented an amputated leg on behalf of his colleague, Dr. Gouley. He gave the following description of the case.

A consultation was held yesterday afternoon at Bellevue Hospital upon the case of a woman who was 71 years of age, and who had been in the hospital about five weeks. A very few points in the history of her case were ascertained by the House Surgeon; and it appears that just about seven weeks ago, she, then being in what she considered good health, was seized with a violent pain in the calf of the left leg. This pain extended down the leg, and continued with considerable severity for several days. On the third day following this attack of pain, a dark colored spot was noticed on the top of the foot, just below the instep. At that time, according to her statement, the toes were not discolored; the discoloration, however, spread with some rapidity towards the toes, until all of them were implicated, and also extended very gradually over the ankle and up the leg; and it was only ten days ago that the mortification ceased to extend, and that a line of demarcation became apparent. This line of demarcation was nearly circular about the limb, and was situated about four inches below the line of the knee-joint. It was suspected that this woman labored under heart disease, and the attending surgeon, Dr. Gouley, thought that he had satisfied himself that there was some disease of the aortic valves. His observation was not verified, however, by any of the gentlemen who examined this patient in consultation.

The question arose as to the propriety of an operation, and also as to the cause of this mortification, which it was thought did not exactly correspond with

the description of gangrena senilis. The opinion was pretty generally expressed that the mortification might depend upon the presence of a plug in the principal vessel of the leg, and the reason why this opinion was expressed was that the disease began of a sudden. In regard to the operation, we were not entirely agreed, but the preponderating opinion being in favor of immediate amputation, it was performed by Dr. Gouley. The operation was performed through the knee-joint. The knife was swept around the leg below the joint, making an ordinary circular flap, and I was quite surprised to see how well the stump was covered.

After the removal of the limb, the most interesting part of the specimen centred itself in the examination of the vessels. A very curious phenomenon was noticed at the time of the operation, as no vessel bled sufficiently to require the ligature. The popliteal artery and vein stood out prominently, and were seen to be filled with a recent dark red coagulum. Other vessels were seen plugged in the same way. Dr. Gouley has examined the specimen somewhat hastily. The vessels were, as I have said, plugged at the level of the section made by the amputation, the proof of which is seen in the presence of plugs in the distal extremities of these vessels. This coagulum, in the case of the artery, extends down it for about an inch and a half; and there, just at about the point where the popliteal should bifurcate, the artery is very much distended, apparently by the presence of a globular plug of fibrine of a yellowish-red color, distinguishing it in color from the dark red coagulum which occupies the vessel above. The arterial coats, so far as I can judge by superficial examination, are diseased; they contain patches of atheroma, and appear to be somewhat ossified. Where the embolus is found, all the arteries above the occlusion are healthy, and for several inches below the arteries are pervious, and do not contain coagula. This plug is pretty closely adherent to the inner surface of the popliteal artery.

Now it struck me as possible that this might not be an embolus from another part, but a coagulation in the distended aneurism of the artery. I think that the argument against it is that the color is different. I should, after all, regard the specimen as one of senile gangrene, caused by the occlusion of the vessel by a clot which has been lodged in that particular locality from some other portion of the body.

Dr. Markoe was inclined to the belief that Dr. Gouley's case was one of obstructive gangrene, from the fact that it commenced so suddenly, not at the toes, but upon the dorsum, and that in less than five weeks the gangrene had spread above the middle of the leg, no line of demarcation having formed, as usual, in the middle of the leg.

Dr. Newman remarked that the result would show whether the diagnosis was right or not; if it were due to embolus the patient would get well, if to senile gangrene the patient would inevitably die. This opinion was afterwards endorsed by Dr. Markoe.

ABNORMAL POSITION OF THE TESTICLE.

Dr. Sands lastly presented a testicle which he had removed under the following circumstances: He was consulted in July last, by a lad, seventeen years of age, with reference to a swelling in the left half of the perineum, which he knew had been there for seven or eight years, and which recently had given him trouble in riding on horseback. The patient was aware of the nature of the swelling, and his mind was much depressed in consequence, and suffering besides from seminal emission, he desired very much to have the part removed. A very slight examination proved that it was due to the presence of the left testicle in the region of the perineum. It lay quite to the left side of the median line, and was just about midway between the posterior margin of the scrotum and the anterior margin of the anus. It had some mobility, and could be moved an inch laterally to the right or left, and two or three inches up towards the inguinal canal; but on ceasing the pressure it would resume its former position. The operation was undertaken in the hope of being able to replace the testicle. The first incision through the perineum penetrated the sac of the tunica vaginalis, and exposed the organ. It was then found that the serous sac was very limited in extent, or rather very narrow, it being just large enough to admit the forefinger, and ran up along the spermatic cord, which was lodged closely in the fold between the scrotum and thigh, and ran up three inches and there terminated. From the circumstances of the case the operation of replacement was considered impracticable, and the organ was accordingly extirpated. The testicle was well developed, being only about one-half of its usual size, and the structure was perfect. The wound healed perfectly, and the seminal emissions ceased.

Dr. Sands remarked that, on consulting authorities, he had found that this particular abnormal position of the testicle was rare. In an article upon the subject in *Todd's Cyclopædia*, it is stated that John Hunter first drew the attention of the profession to the subject, and that he saw two cases. No description of them, however, is given. Later, it is stated in the same article, that two cases came under the observation of Ricord. In one of these the testicle was inflamed as the sequence of gonorrhœa, and he was about to open what he thought to be an abscess, when he discovered it on examination to be a testicle. Two were also stated to have been seen by Vidal (de Cassis). The curious fact was, that they were two brothers, similarly affected. A seventh case has been spoken of in one of the British journals, as having been seen and operated upon by Mr. Partridge. The operation of replacement was first attempted, but failing to do so, the organ was removed. Another case was alluded to in *Holmes' Surgery*, in an article by Mr. Humphrey. He speaks of having seen a testicle, not in the perineum, but in the angle between the thigh and scrotum; and he speaks of it in reference to the question, whether it had traversed the scrotum or not. In that instance he found that the cord passed directly upward. Finally, a case has been noticed by a German surgeon, Zeiss, who, in an attempt to perform lithotomy by the left lateral incision, came across the testicle in that locality, and changed his incision to the opposite side.

The Society then adjourned.

The Embalmed Body of the late Emperor Maximilian.—"In regard to the body of Maximilian," says a *Herald* correspondent, writing from the city of Mexico under date July 29th, ult., "it was embalmed by Dr. Ribadaneira, Medical Inspector of the Army of Northern Mexico, on the staff of General Escobedo. After the embalment it was taken to the chapel of the Convent of the Capuchin Nuns, where it lay a few days ago under a guard awaiting to be claimed by some competent and authorized person. It is stated that the doctor has a claim upon the corpse for $10,000 or $20,000, professional fee for services, and that it is held for this fee. The coffin is an ordinary affair, the face of the corpse covered with glass. The body is poorly dressed, and imperfectly embalmed."

Correspondence.

MEDICAL MATTERS IN PARIS.

(From our own Correspondent.)

To the Editor of the Medical Record.

Sir—At the last *séance* of the Academy of Medicine the discussion on tracheotomy was continued, and M. Peter made quite a discourse on the subject, describing the practical difficulties in the way of the operation, and suggesting means of overcoming them. Among the principal, is the small size of the trachea in young children. The operator is liable, in making an incision with the bistoury directed perpendicularly to the windpipe, to pass completely through that organ to the œsophagus. Again, the index-finger used to hold the trachea in place, frequently pushes it to one side, so that the incision is made to the right or left of the median line. This would be of small consequence if the trachea was steadily maintained in the first position, but too often the finger slips, the trachea returns to the middle of the throat, and the incision is concealed from view. These difficulties are more formidable as the child is younger, but M. Peter thinks that the age alone never offers a formal contra-indication, since it is well in case of need to operate on the smallest child, and give it a chance for life at a moment that all others are lost.

M. Peter considers, however, that tracheotomy is never necessary, and therefore never advisable, except in cases of pseudo-membranous croup, and believing that pseudo-membranous angina invariably accompanies this disease, he abstains from the operation whenever he cannot find false membranes in the pharynx. The extension of the membranes to the bronchial tubes is, however, of course a circumstance of unfavorable omen for the operation. It is often difficult to diagnose this complication. M. Moutard Martin signalizes pale asphyxia as an excellent sign. M. Peter adds, an unusual frequence of the respiratory movements, whose rapidity is slackened in simple laryngeal croup. Whenever there are more than fifty inspirations a minute, there is good reason to suspect a pseudo-membranous bronchitis.

Subsequent to the operation, the practitioner possesses another sign of this formidable complication. When the canula left in the tracheal wound does not become filled with mucosities, when at the end of twelve hours it is still dry, there is too good reason to believe that the mucous surface of the bronchial tubes is covered with false membranes which effectually prevent secretion.

M. Peter declares that pseudo-membranous bronchitis is quite frequent, occurring, in his experience, 52 times in 105 fatal cases.

Pneumonia coincident with the croup does not absolutely forbid the operation. M. Grisolle observes, that his first successful case of tracheotomy was embarrassed by this complication. M. Nelaton had been called upon to operate, but recognizing the concomitant pulmonary lesion, refused. M. Grisolle then assumed all the responsibility, and operated himself—the child recovered.

M. Archambaud had obtained 21 cures among 67 operations, including two upon adults. The most of these cases had already reached the last period when the operation was performed, the patients sometimes being completely insensible. Among 53 operations made under such circumstances, 17 had succeeded, and among 12 cases treated at an earlier stage of the disease, 4 were saved. The proportion therefore is about the same.

M. Peter assumes as contra-indications, an excessive waxy pallor, ganglionic engorgement, extreme puffiness of the neck, which is neither œdema nor emphysema, all signs of general intoxication.

Cases of stridulous laryngitis are successfully treated by M. Peter with steam. The child is surrounded by half-a-dozen basins filled with boiling water, so that the respiratory organs may be incessantly bathed in the humid atmosphere; the croupal symptoms generally subside in about an hour.

The month of June has been unfavorable for the performance of tracheotomy, since out of eight operations, divided equally between the Children's Hospital and Hôpital St. Eugénie, six have proved fatal.

Appreciation of Medical Constitutions.

This observation enters into a report, presented by Mr. Besnier to the Academy of Medicine, on the medical constitution for June. An effort is being made just now to collect materials for a rigorous appreciation of "medical constitutions." The value of such an appreciation cannot be too highly estimated, when it is remembered how largely this condition enters as an element into the effect of medical treatment. There can be no question, that the reputation of a large number of methods and medicines has been made by the fact that they were administered at a moment when the disease had assumed a benign type, and tended of its own accord to a favorable issue. During this month of June, nearly all the cases of typhoid fever in the hospitals have recovered. There has not been less, but rather more of the disease than usual, and the first stages have frequently opened with considerable severity, but any dangerous symptoms have quickly abated, and the course of the malady has been equally satisfactory under any treatment. This reminds me of an amusing anecdote related by Dr. Maximin Legrand in the feuilleton of the *Union Médicale:* One day, the *garçon de service*, employed in the wards of Mr. Fouquier, appeared with two black eyes, and his face covered with bruises. "What is the matter with you, my man?" inquired M. Fouquier, always kind and polite. "I have been fighting with M. Bouillaud's *infirmier*, and he is better done for than I am." "You were very wrong; what were you fighting about?" "Because he insisted that it is always necessary to bleed in typhoid fever!" The gravity of the physician was not proof against this unexpected reply.

When it is remembered that M. Bouillaud is the author of the famous system of bleeding in pneumonia twice a day, *coup sur coup*, and extends his sanguinary propensities to typhoid fever also, the belligerent enthusiasm of his humble subordinate may be easily explained.

The Administration of Mercury in Syphilis.

At the Imperial Society of Surgeons, the discussions still turn upon the question of the administration of mercury in syphilis, a question that seems subject to periodical agitation. The most conspicuous part of the debate has been that sustained by M. Desprès, whose views have been entirely special, "so special," observes Dr. Reveillant, "that he remained entirely alone in his opinion." For M. Desprès is radical enough to deny any efficacy to mercury whatever, in the disease in which it has for so long been considered the sheet-anchor. He is resolved never to administer the baneful drug either in primary, or secondary, or tertiary syphilis. Theoretically, he bases his principles upon the idea, that the malady is already so exhausting to the patient, that the debilitating effects of mercury can work him nothing but injury. Practically M. Desprès appeals to the result of his experience in the Hôpital Leourcine, among 234 patients, of whom some were

subjected to the classical treatment, others to a course of tonics. Among the first, a percentage of 28 for 100 returned after more or less time to the hospital for fresh treatment of the disease, while in the second class the returns were only 10 for a hundred. M. Desprès declares, rather fancifully, that the physician should endeavor to restore his patient to a "life of infancy," regulating his food, sleep, and exercise, building up his shattered constitution, and that nature would eliminate the poison. "We cannot believe that a purely empirical medicine can be a contra-poison against syphilis, or that there is any sense in employing a drug that exists in the blood like foreign matter, which does not assimilate with a single fluid, and which, even in exercising a certain perturbating and deleterious effect on the economy, neither solicits nor suspends the regular exercise of a single function."

The only points of importance in M. Desprès' remarks, are the statistics, and their value is vigorously contested by M. Depaul. He observes that the comparison between the two modes of treatment was not sufficiently extended, and moreover, that the basis of comparison was fallacious, since a number of the patients who had been treated by expectation, probably absented themselves from the clinique, not because they were cured, but because they were disgusted with the treatment. Nothing exasperates a hospital patient so much as the suspicion that nothing is being done for him. He maintained that this expectant system was extremely dangerous, since the most serious destruction of tissue, such as the perforation of the palatine vault, might take place while the physician was watching with folded hands. M. Depaul laid especial stress on the efficacy of mercury administered for syphilis contracted during pregnancy, when, he declares, it *uniformly* prevents abortion, in recent cases.

A case that recently occurred in the service of M. Hérard at Laribaissière, which I had an opportunity of observing myself, is in entire accordance with this assertion. The subject was a woman of about 35, in the third month of pregnancy. Several years previous she had been treated at Lourcine for primary syphilis, and two years ago had been an inmate of Laribaissière for syphilitic angina. Each time she had completely recovered, and it was impossible to ascertain whether the renewal of the disease was a manifestation of the original malady, or the result of a new infection. At the moment of her entrance, in June, the patient presented an eruption of syphilitic erythema, copper-colored blotches disseminated over the entire body; a small tumor on the right frontal bosse, with broad base, but slight elevation, but the seat of lancinating pains exasperated at night, and which extended also to the temples and the ears: a gray ulcerated fissure at the left commissure of the lips; a grayish *plaque muqueux* on the right labium majus of the vulva. Fine subcrepitant râles could be heard at the summit of the left lung. A cough had existed for several months, but the patient professed to have been perfectly free from syphilitic accidents at the commencement of her pregnancy. She was ordered a pill of corrosive sublimate containing five centigrammes, to be taken every evening. This was the 11th of June. On the 12th, in addition she commenced to take 25 centigrammes of iodide of potassium every morning. By the 19th the pains in the head had entirely ceased, and the eruption had begun to fade. By July 11th the tumor had almost disappeared, as also the *plaque muqueux*, and the eruption was entirely gone. The fissure of the lips was also healed, and the patient left the hospital on the 16th of July in a perfectly satisfactory condition (the cough also was diminished), both as regards her general health and the march of the pregnancy. The treatment was continued uninterruptedly during the first month; after that, the sublimate was suppressed, and the iodide alone continued.

MM. Guérin, Perrin, Verneuil, and Velpeau, also took up arms in defence of mercury. They nearly all insisted upon a *prolonged* treatment, not less than two years, as absolutely necessary to radical cures. M. Guérin therefore disapproves of large doses. He prefers the protiodide associated with opium, but in case that is supported with difficulty, he has recourse to fumigations with cinnabar. He does not believe that inunctions alone are sufficient, while they have the inconvenience of producing salivation more speedily than other methods of administration. M. Perrin, with an experience of 470 cases, treated at Val de Grace, disbelieves that mercury administered in primary syphilis can prevent the regular evolution of the disease, and therefore confines himself to local cauterizations, and only commences general treatment with the appearance of secondary symptoms. He is careful to administer chlorate of potassa coincidently with the mercury in any form. He acknowledges that no treatment is infallible against relapses, but that the physician is simply called upon to be persevering, and reapply the treatment at each outbreak until he has mastered the disease.

M. Verneuil and Velpeau believe in the beneficial effects of mercury at all periods of the disease, and the former declares that salivation is an imaginary phantom. Syphilis *may* exhaust itself spontaneously, but such cases are rare, and generally the patients are exhausted first.

The only person who in any way sustained the views of Desprès was M. St. Germain, who, while professing to believe that mercury does render some indefinite service in syphilis, declares at the same time that he considers it as useless against chancre, that he has a "certain tendency not to administer it in secondary syphilis," and that he always combats tertiary symptoms by iodide of potassium.

It appears, therefore, that not much new light has yet been thrown on this important subject by the debate. The society is waiting to hear the opinion of M. Diday, pupil of Ricord, whose voice would naturally have much influence.

More original views were presented in a recent discussion at Lyons, on the same subject, where several of the members maintained that it was unnecessary to spend much time or thought upon the cure of patients who had fallen a prey to the disease in consequence of misconduct, and that especially such patients should never receive the benefit of gratuitous treatment.

VESICO-VAGINAL FISTULA TREATED BY THE AMERICAN METHOD.

M. Courty, Professor at Montpellier, publishes an account of six cases of vesico-vaginal fistula, successfully operated by the "American method." The *Bulletin of Therapeutics* publishes the details of two that presented unusual difficulties. In one, the fistula, five centimetres long, dated from four years, the urethra was obliterated, and vagino-pubic adhesions existed. There was also a hernia of the bladder. Owing to the adhesions, the operation was exceedingly difficult, the hæmorrhage abundant, and the lips of the wound did not completely close. After a second operation, however, performed upon the gaping part of the suture, adhesion was effected, and a radical cure completed. The treatment lasted four months. In the second case, the patient, a woman 28 years old, had already been operated upon unsuccessfully, and a cicatricial tissue, hard and thick, bordered the edges of the fistula, which was eight millimetres long. In this case also, two operations were necessary.

M. Courty only revives the borders of the fistula, at the expense of the vaginal mucous membrane, carefully avoiding the vesical. For the deep sutures he uses Startin's needles, and for the superficial, Sims'. He leaves a sound constantly in the urethra, and by means of a canula pushed to the bottom of the vagina, has the cavity washed out twice a day with a lotion to prevent suppuration. The wires are withdrawn between the fifth and tenth days.

MISTAKE BETWEEN AN OVARIAN AND RENAL CYST.

The *Gazette Hebdomadaire* quotes a case of a mistake made between an ovarian and renal cyst by the distinguished Dr. Wells of London. A woman of 43 years presented herself at his hospital, to be treated for an abdominal tumor, that two experienced physicians had already pronounced to be an ovarian cyst. They had refused to operate, however, because a loop of intestine was recognized as passing in front of the tumor. On the 4th of August, when Mr. Wells first saw the patient, the tumor had risen to the epigastrium, and the patient seemed threatened with suffocation. He punctured the cyst to her immediate relief, and the tumor and dull percussion sound entirely disappeared. Two months later, the woman returned to the hospital, with the tumor again filling all the abdomen. On the left of the umbilicus was recognized a hard band, which was supposed by some to be a loop of intestine, by others the Fallopian tube. The menstruation was regular; the urine contained mucus and epithelium, but no albumen. The abdomen was largely opened in the median line. The incision of the peritoneum revealed passing in front of the cyst, the transverse and descending colon, intimately adhering to the abdominal walls and also to the cyst; 15 pints of gray purulent liquid were withdrawn from the cavity. The destruction of the adhesions revealed a second cyst, which yielded two pints of clear liquid. Finally, since it was impossible to destroy the deep adhesions, the cyst was left in place and the wound closed. The patient succumbed the next morning. At the autopsy the following state of things was manifest: Four pints of sanguinolent serum and of coagula were effused in the peritoneum. *The uterus and ovaries were perfectly healthy.* The right kidney was hypertrophied, and much softened, a calculus of 40 centigrammes was found in the calix. The left kidney was converted into a cyst more voluminous than the head of a fœtus, containing a single cavity divided by bridles, and whose walls were formed by the renal capsule. The parenchyma had completely degenerated and atrophied.

A precisely analogous case occurred here the other day, at La Pitié, in the ward of M. Belrier. The patient was 48 years old, and feeble, and on this account it was decided that ovariotomy was unadvisable, although an ovarian cyst was diagnosed without any hesitation. Tapping was followed by the complete collapse of the tumor, which, however, resumed its original dimensions in two or three weeks. At the time of the patient's death, two or three weeks after the operation, the cyst contained several quarts of liquid, and occupied all of one side of the abdomen, from the iliac fossa to the hypochondrium. At the post-mortem, this tumor was found to be an enormous cyst of the kidney, whose entire parenchyma was destroyed, and only the capsule left, lined by a serous membrane of new formation, but of sufficient secreting power to reproduce the entire volume of liquid in the course of two or three weeks.

Mr. Wells has profited by his mistake to make a more careful study of the points of diagnosis between renal and ovarian cysts, and has published some most valuable reflections. The diagnosis, he says, should be based on the following circumstances:

1st. Whenever a bridle of intestine is recognized as passing in front of the cyst, it is almost certainly renal, since the ovarian cysts push the entire intestinal mass of it against the vertebral column.

2nd. The ascending colon would be found on the internal side of the right kidney; the left is crossed from above downwards by the descending.

3rd. The urine, which should be subjected to a microscopic examination, nearly always contains mucus, epithelium, pus or albumen, in cases of renal tumors, whilst the menstruation is not disturbed as it is in ovarian disease. (This latter circumstance evidently cannot be relied upon in the numerous instances where the tumor is developed after the ménopanse.)

4th. The bridle, on percussion, is found to be contracted like a cord, and is mobile.

5th. In the case of ovarian cysts, the liquid often escapes by the Fallopian tube, after adhesions have been contracted, while in renal cysts the way of escape is by the ureter and bladder.

6th. Renal tumors appear first in the hypochondria, and develop downwards; ovarian in the iliac fossa, and pass upwards.

Mr. Wells concludes that henceforth no one need make a mistake between the two diseases.

CANCER OF THE KIDNEY, ETC.

While speaking about renal tumors, I must mention a highly interesting case at present in the service of M. Hérard, at Laribaissière, where an inverse mistake in the diagnosis was induced by the ambiguity of the symptoms. The subject, a woman of about 38, entered the ward the 31st of March, presenting an abdominal tumor that occupied the left iliac fossa, and extended in front to the umbilicus, and behind to the spine. A smaller tumor was situated in a precisely similar manner at the right side. The patient had begun to suffer five months before her entrance, with severe pains in the renal and dorsal regions, which were presently followed by the development of the left tumor, which rapidly increased to its present size. The disease had attacked the right side about a month ago. The anterior border of the tumor could be felt distinctly in front; behind the limits were more vague. Clear percussion sound was obtained between the dulness of the tumor, and that proper to the spleen. Also, the mass did not continue into the inguinal region, or pass the median line, so that the idea of an ovarian disease was set aside. The position at the left of the principal mass put the liver out of the question, and the appearance of a similar tumor in the right renal region indicated that a symmetrical organ was invaded. Everything, therefore, led to the belief that the disease occupied the kidney, a belief (as I hasten to say) that so far nothing has contradicted. But the tumor presented quite distinct fluctuation. The complexion of the patient, though pale and chalky, had no tint of special cachexia, and the diagnosis of renal dropsy (*hydronephrose*) was pronounced. A surgeon in consultation agreed in this opinion, and tapped the tumor. There issued, neither urine nor serous fluid, but a small quantity of juice, which, both to the naked eye and the microscope, was evidently cancerous. The greater part of the tumor was, after all, solid.

The patient is still alive, and her condition is liable to great variations. For a long time after her entrance to the hospital she suffered almost continually from pain, which, finally, seemed to be relieved by subcutaneous injections of morphine. A week ago she was a great deal better, sat up, embroidered, felt quite at her ease, but a relapse has just occurred, and she is now about in the same state as when she entered. During the first weeks the tumor seemed to increase, but for the

last six weeks it has been quite stationary. Since the tapping (which did not materially diminish the size of the tumor), the sensation of fluctuation has disappeared, and now the surface of the mass is more uneven, though never hard, or distinctly bosselated. The cancer is evidently an encephaloma.

CONTRACTIBILITY OF MUSCULAR FIBRE.

Before closing my chronicle, I must tell you of some singular experiments that have just been made by M. Rouget upon the contractibility of muscular fibre. M. Rouget commenced his researches on the subject, by the study of the style of the vorticellus, where the muscle consists of a single fibre. This is elongated during life, but under the influence of excitants, or after the death of the animal, the spiral returns brusquely on itself, and is shortened four-fifths, being transformed into a spiral spring, pressed closely together. Experimenting subsequently upon living animals, Rouget found that everything that interfered with the nutrition of the muscles, made them contract. If the main artery of a limb were tied, if galvanic excitement was continued incessantly, if the muscles were subjected to a continually increasing heat or to cold, the result was always the same, *they contracted*. When the contractions were too frequent, the myographion showed that the transverse lines repeatedly approached each other, could no longer separate, but remained, as it were, agglutinated. Rouget declares that the primitive muscular fibre is constituted by an elastic fibre twisted in a spiral, and that the transverse lines mark the curves of this spiral, and not the segmentations of a straight bundle of fibrillar elements, as usually maintained. The state of repose, the normal state of this spiral, is that of the approximation of its rings, which appears to the eye as the contraction of the muscle. The lengthening is the really active process, and can only occur during the vigor of life. The cadaveric rigidity of muscles is precisely the same phenomenon as that occurring when their vitality has been exhausted by heat or cold, or starved out by lack of food. When a muscular fibre shortens, it does so in virtue of its own elasticity, which triumphs over the vital force developed in the act of nutrition. This or any other force that excites motion in the muscles, at the moment that it ceases to act, is transformed into heat, and hence the rise of temperature observed in muscles entering into a state of contraction.

Muscles do not contract in successive undulations or shocks, except at the beginning of the action of an external excitant, or when they are exhausted by fatigue. Contracted muscles seen under a microscope, are found to be perfectly motionless. When they contract by the will, there are no undulations even at the beginning of the period.

The influence of this theory, which reverses the passive and active sides of muscular movement, upon tetanus, chorea, and all diseases of muscular activity, is easily perceived. But M. Rouget as yet attempts no pathological applications.

Un joli mot, as the French say, in conclusion. You are familiar with the name of Charcot, I suppose, and of his intimacy with the distinguished surgeon, Vulpian. The two have so often published together, that their names are inextricably associated to the public ear. The other day a friend of Charcot's observed:

"Charcot has been made happy this morning. He is the father of a son."

"What," exclaimed a bystander, "Charcot and Vulpian?" But it was explained that this time it was Charcot, *tout seul*.

THE ORIGIN OF MODERN ANÆSTHESIA.

I have not yet finished, for I must mention the compliment paid by the *Gazette Hebdomadaire* to the MEDICAL RECORD, as "the most serious medical journal in the United States." When the RECORD ascribes the first (chronological) honor of chloroform to Dr. Wells, the *Gazette* thinks that the question is settled.

P. C. M.

JOTTINGS OF A MONTH ABROAD.

TO THE EDITOR OF THE MEDICAL RECORD.

DEAR DOCTOR—Seven weeks ago I was with you in your *sanctum* in Walker Street, as little dreaming of a trip to Europe as of journeying to the moon; to-day finds me on board the St. Laurent, bound from Havre to New York. Summoned by cable-despatch to a sick relative at Rome, I left home at a few hours' notice, reached the "eternal city" in seventeen days, and, with my invalid in charge, came, by easy stages, once more to ship-board. With only four to five weeks abroad, and with another and paramount object of attention on hand, you may well suppose that I have had but little time to devote to medical study and observation, and that I cannot have much to tell you and your readers. Still my visit has not been entirely sterile, and, after fifteen years' absence from Europe, it has afforded me almost as much pleasure as would be enjoyed by a novice. Perhaps a few jottings by the way may be worth *Record*ing, even in a somewhat desultory manner.

I had not before appreciated the danger incurred by pleasure-seekers in Italy, especially during the spring and summer. The relative referred to left home, apparently in good health, in the month of March, and made the tour of Italy with the usual labor of sight-seeing; and any one who has tried it knows how exhausting this is. On the eve of leaving Rome he was seized with fever, from which he had partially recovered, when a hæmoptysis took place, and auscultation of the lungs showed that tubercles, which had probably existed before in a latent state, had been still further developed. He was sent to the Alban Hills, in the neighborhood of Rome, but even there the climate was so depressing that he was daily losing ground, until my arrival enabled him to be brought to a cooler and more healthy region. Nor has this been an isolated case this season. Two very similar ones have come to my knowledge, both happening to American travellers, one of which has already terminated fatally, and the other is likely to do so. Dr. J. Henry Bennet, in his "Winter in the South of Europe," p. 195, says: "Rome is a winter residence for healthy tourists, not for invalids; malaria reigns there, more or less, all the year. Every winter it makes victims, even among the healthy, and the medical practitioners who have been settled there for years say that malarial fever complicates, more or less, nearly every form of disease, slight or severe, that occurs, even during the winter months." These facts should be borne in mind by physicians when advising patients with regard to a foreign tour.

I had hoped to be able to go northward from Rome and see something of medical matters in the north of Italy, and possibly in Germany. I wanted especially to see 'in Florence' Galligo, the author of a most able work on venereal diseases, and Professor Pellizari, who first established beyond dispute the inoculability of syphilitic blood; to become personally acquainted with Drs. Tamburini and Ricordi, in Milan, and to visit the Hospital Maggiore, where the latter is fast making for himself a name by his studies in syphilography. The bright stars in Germany are too well known to require enumeration. My patient, however, was too ill to bear the fatigue of travelling by land, and so I was compelled to turn my back upon all these anticipated pleasures, and

even upon the magnificent fête of the "eighteenth centenary of St. Peter" about to be celebrated at Rome, and start for Paris, viâ Civita Vecchia and Marseilles.

The loss was in a good measure compensated for by the opportunity thus afforded of passing two days at Lyons on the way. It is not often that one has a chance to visit a place so remote from the larger medical centres, although the desire to see such men as Diday and Rollet, and others of the famous medical school of Lyons, would make one put up with many inconveniences to accomplish it.

I visited the Hospice de l'Antiquaille in company with the surgeon-in-chief, Dr. Gailleton, who kindly pointed out the cases of interest, among which were several instances of the communication of syphilis among glass-blowers, through the medium of the mouth-tube used in common by a number of men belonging to one set. The frequency of this occurrence has induced the authorities to adopt certain preventive regulations. Cases of gono-rhœal rheumatism were also unusually numerous in the wards, and several of them in women.

This hospital is admirably situated upon the heights of Fourvières, several hundred feet above the city, and commanding a view of Mont Blanc, at a distance of ninety miles. It is the only institution of the kind at Lyons into which venereal cases are admitted, and hence it affords an admirable opportunity for the study of this class of diseases. Aside from its lunatic department it has three divisions, one devoted to the skin diseases of children, one to venereal diseases of men, and a third to venereal diseases among women. Each surgeon takes these three divisions in order, devoting six years to each, and at the close of his eighteen years of service resigns. This is a bad arrangement on one account, since it leaves some men like Rollet and Diday, still in the prime of life, without a public field for observation or instruction.

Personal interviews with the two physicians just named were most agreeable. Diday I should judge to be about fifty-four years of age. He looks not unlike our friend, Dr. A. C. Post, and has all the activity and vivacity of the latter. He was much interested to know whether anything was doing in America with regard to the prophylaxis of venereal, a subject which at present is engaging renewed attention both in France and England. A novel and rather questionable idea advanced by Diday is the parasitic origin of all venereal diseases, including gonorrhœa. His argument is this: It is the prerogative of organized beings to produce their like; venereal and other contagious diseases reproduce themselves, and hence must be of parasitic origin. Diday expects that this view will yet be confirmed by the microscope.*

I was particularly struck with the fine appearance and affable manners of the handsome Rollet, a younger man than Diday, but who is entitled to rank among the first syphilographers of the present day. Surely, I know of no one who has contributed more to syphilography than he during the last ten or twelve years.

At the invitation of these gentlemen I was present at a meeting of the Academy of Medicine of Lyons, where I found an assemblage of some thirty to forty physicians and surgeons, seated round an immense table, under the presidency of Dr. Bouchacourt, and occupied with a discussion upon the contagiousness of cholera, carried on in a scientific spirit which might serve as an example to some of our medical societies. It was amusing, however, to observe how severe a Frenchman can be in debate, and yet how parliamentary in his language.

* A letter from my friend, Dr. J. H. Salisbury, of Cleveland, Ohio, received since my return home, intimates that he has already accomplished something in this direction.

Arriving in Paris a few days afterwards, of course I made it one of my first objects to see Ricord, the Nestor of the syphilitic world, and one of the few bright lights of twenty years ago still remaining. I was told that I should be likely to find him the least occupied at about eleven o'clock in the evening, when his office hours, which commenced at four in the afternoon, were *nearly* over. Calling at this hour, however, I found his waiting-room still filled with patients, and he afterwards told me that he was rarely through before twelve or one o'clock. Ricord has "aged," as an Englishman would say, since sixteen years ago, but his activity and endurance may be inferred from the amount of work of which he is still capable. If any medical man ever had reason to be satisfied with the well-merited honors that all confer upon him in his green old age, it is certainly he. There was no time to talk over with him any of the mooted questions of syphilis, but there is no doubt (and my friend, Dr. Atlee, of Philadelphia, will please notice the fact) that Ricord now admits in full the recent doctrines upon venereal diseases, including the duality of virus, the contagiousness of the secretions of secondary lesions and the blood, and also vaccinal syphilis. Such was the universal testimony of his friends in Paris, and I afterwards heard the same from Mr. Acton, in London, who had recently spent several days with Ricord, and had freely conversed with him upon these topics. It may be, as I judge from what I heard, that this surrender was somewhat reluctantly forced upon him at an age when he felt he had not the time or opportunity to prolong the contest, but the fact remains the same. I was told in Paris that he still refused to admit the possibility of vaccinal syphilis, but Mr. Acton informed me that he now yields even this.

The most prominent among the younger men at Paris who devote themselves to the specialty of venereal diseases, and the one most likely to succeed Ricord in his position so far as any one can, is probably Fournier, the pupil and ardent admirer of Ricord, and the editor and annotator of Ricord's *Leçons sur le Chancre.* I had the pleasure of accompanying Fournier through his wards at the Hôtel Dieu, and listening to an admirable lecture from him upon renal paraplegia, which was illustrated by a case in his service. He is the author of various articles relating to venereal in the *Nouveau Dictionnaire de Méd. et de Chirurgie pratiques,* now in course of publication by J. B. Bailliere. These articles are not only an excellent resumé of the subject—the best that I am acquainted with—but contain much original matter, and will probably at some future time be incorporated in book form.

From Fournier's lecture-room I went into Maisonneuve's wards, where I found him making his visit and surrounded by a crowd of students. On being introduced to him he stopped to compliment the success of American surgery, and among several instances, mentioned the remarkable results obtained in ovariotomy as compared with the results of the operation in Paris. I suggested that the atmosphere of hospitals was peculiarly unfavorable to this operation, but I soon found that I had touched him in a tender spot, for he immediately began a lecture lasting at least twenty minutes, in which he attempted to show that atmospheric and local influences have nothing whatever to do with the success or failure of any operation, and that everything depends upon the skill of the surgeon! "When we know how to operate in cases of ovariotomy as well as American surgeons," said he, "we shall have equally as good results." One of the internes whispered to me that this was a favorite idea of Maisonneuve, and that I had better not reply to his arguments if I wanted to see anything of his service, since he would keep on

talking all day. Maisonneuve is as fond of using the *écraseur* and his *urethrotome* as ever.

Upon calling to see M. Clerc, I found him an older man than I had anticipated, but probably not over 45; of most agreeable manners, and, with an American wife, well posted in American affairs both civil and medical. Clerc is too well known for what he has done in syphilography to render it necessary for me to say anything on this score. He is now correcting the proofs of the second fasciculus of his work upon venereal diseases. I accompanied him in his visit to the wards of St. Lazare, devoted to the prostitutes of Paris—a privilege rarely accorded even to medical men, and was struck with his skill in diagnosis. I wish I had time to describe some of the interesting cases there seen. I may mention *en passant* that he does not believe in the *chancre mixte*, but this might perhaps have been anticipated from his peculiar ideas as to the relationship of the chancroid and the true chancre.

I have found the lost Pleiad! Bassereau "still lives," the author of the most logical essay upon venereal ever written; the man who first stirred up all this hubbub about unity and duality; who ruthlessly "sent flying" our early ideas as to the influence of idiosyncrasy upon the development of the syphilitic germ, and *who will ever be known and thanked for having done it!* For years it has been a mystery to me what had become of this man. Nothing further appeared from his pen. His name was nowhere seen in the reports of the meetings of various medical societies, at which the results of his labors were discussed. I am afraid to say how many students, just returned from Paris, I have questioned the last ten years as to what had become of Bassereau, and have usually received a cold douche in the reply—"Never heard of him!" The fact is, to speak poetically, Bassereau's personality appeared, like a meteor; his work remained, a fixed star!

Having been born a Yankee, I can now make a "guess" towards a solution of the mystery, and one which I think is not far from the truth. Even Parisian society is not quite free from the prejudice that it is somewhat *infra dig.* for a medical man to make a specialty of venereal diseases. Bassereau, a man of unusually refined tastes and sensitive feelings, published a book which reviewed the whole ground of venereal diseases, and contained the germ of almost a complete revolution in the prevailing views upon the subject; and he instinctively gave it the modest title of "A Treatise upon Skin Diseases symptomatic of Syphilis!" Vain subterfuge. Imagine his horror at finding he was appreciated, and that in spite of himself he had become *venereally* famous! What wonder that he should have shut himself within his elegant apartments in the Rue de Tournon, and found consolation in the beautiful paintings with which his taste for art has adorned the walls!

Seriously speaking, however, Bassereau never intended to make a specialty of venereal. Circumstances led him to investigate certain points connected with it. This he did with the genius innate in him, and he discovered a truth which he gave to the world. This done, his work was accomplished. His book was complete in itself, requiring neither emendation nor addition. The fact which it was intended to prove was generally accepted. The purpose he had in view was fulfilled! He had finished *a good work!*

The reputation, however, which his book gave him, has been the source of no little consultation practice in venereal cases, so that his interest in the subject has been kept up, and I was glad to hear from him that he had already written a complete treatise upon the pathology and treatment of venereal diseases, which he should publish "by and by."

I did not see Auzias-Turenne, who is still living in Paris, as firm a believer as ever in syphilization, which, however, is about defunct, both in France and England; in the latter country especially so, since Boeck's manifest failure during his recent visit there. It is said that Auzias-Turenne still practises his inoculations upon patients in a quiet way, but that they (the patients) are first obliged to sign a paper stating that the treatment was undertaken at their express wish, so that he may be protected against any legal process.

But this letter is already much longer than I intended, and I have left myself scarcely any time or space to speak of London, where, however, I was only able to remain some three or four days, and to do little more than visit the Lock Hospital, and to call upon two of the most noted syphilographers, Mr. Acton and Mr. De Meric. The latter conducts the venereal department of the London Lancet with great ability, and is well known from his Lettsomian lectures, and other contributions on the subject of venereal.

Upon the continent, the modern views of venereal pathology, the duality of virus, the contagiousness of secondary lesions, etc., are almost universally adopted. The same cannot, I think, be said of English surgeons, many of whom, especially among the older men, still adhere to the old doctrines. Mr. Acton, for instance, in his green old age, is still firm in the faith of twenty years ago; but this splendid specimen of a "fine old English gentleman" (in the fullest sense of the word) acknowledges that the time for him to undertake renewed investigation is past. He said to me: "What can I say about all this muddle that you have got venereal diseases into? One of you says one thing, and another, another. My days for professional work are over. I have no hospital for observation and experiment. I only spend my mornings in town, and the rest of my time I am on my farm, in which I am most interested. You talk about the contagiousness of secondary lesions, but I don't see such cases. If you ask me my opinion, I can only reply, 'Ricord says he believes it.' Why doesn't some young man take hold of these matters, and clear them up?"

Notwithstanding this partial retirement from active life, Mr. Acton is deeply interested in the movement for the prevention of venereal diseases which is now going on in England, and he has recently visited Paris for the purpose of examining anew the working of the system there in vogue. It is probably known to many readers of the RECORD, that the parliament of Great Britain has already passed an act which went into operation in December, 1864, and was entitled the "Contagious Diseases Prevention Act." The object of this act was the prevention of venereal diseases in the army and navy, and its operation holds good only for such towns as are military or naval stations. Its general features are that the police of such towns have the power of causing any common prostitutes to be taken to a dispensary to be examined as to their state of health, and, if diseased, of enforcing their stay in government hospitals until cured. Already this law has caused a very considerable diminution of venereal disease in the army and navy, and also among the civil inhabitants of these towns; and it is recommended by the committee of the Harveian Society of London, to which the matter was referred, that the same regulations be introduced in London and other large towns. Even now London has a Lock Hospital for both male and female patients, which has been in existence for more than a century! Is it not time that some provision for this purpose were made in America? But this subject, as well as an account of my visit to the Lock Hospitals, must be deferred to another occasion.

I will only add one word with regard to the endoscope, which does not appear to be used to any extent either in Paris or London, and is regarded as of very little *practical* value, while a catheter still has an *eye* to it, or while the surgeon who is entitled to use a urethral instrument, whether a sound or a catheter, has an "eye in the end of his finger."

Yours truly, F. J. BUMSTEAD.

THE SANITARY CONDITION OF CHICAGO

(FROM OUR SPECIAL CORRESPONDENT.)

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—Favored by a season remarkably conducive to health, and cared for by an energetic Board of Health, our city has enjoyed a degree of immunity from disease, which has never been surpassed since the colonization of the north-west territory. The weather has been singularly fine, with very little of that excessive heat which often renders the summer months so enervating in the prairie-land. Thunder-showers have been infrequent; yet there has been no drought to parch the soil. Above all there has been almost none of that steaming, sultry, equatorial weather, which last year was so favorable to the propagation of miasmatic diseases. Our new Board of Health has displayed commendable vigor. Under their administration, the long-forgotten voice of the scavenger has been again heard in the streets. The gutters and sewers were thoroughly cleaned, and the alleys were purged of manure at an early date in the spring. The bodies of nine thousand eight hundred and thirty-nine dead dogs were deported from the city, and of nuisances a host without number were thoroughly abated.

For the first time in its existence, Chicago has been presentably clean, much to the astonishment of the innocent civilian who had never experienced the good effects of a little military energy and dispatch in the administration of public affairs. In fact, the city is as clean as it can be so long as the great work of providing sewerage, pavement, and water, has not yet reached a point where it can be adequate to the supply of our increasing population. The present condition of our water-supply affords a marked example of the difficulties with which a growing community must contend. Placed in communication, by a magnificent tunnel, with an inexhaustible reservoir of the purest and most delicious water that has ever been carried to any city, we have actually known suffering during the past season for want of that element; and another month will pass before the completion of the new pumps will afford a sufficient supply.

"Shall we have cholera this year?" is the great question which is now upon the lips of every one. In spite of a considerable increase of population, the mortality of 1867 has been much less than during the corresponding months of 1866. During the month of July, the usual increase of bowel complaints has been remarked. There has been a more than common tendency to dysentery. And it cannot be denied that rice-water stools, with vomiting, cramps, and suppression of urine, have been occasionally encountered by some of our most experienced diagnosticians. The Board of Health, while refusing to name these as cases of Asiatic cholera, takes pains to deal with them as if they were such. There can be no doubt that the germs of the disease exist in Chicago, but whether they will slumber innocuous, or whether they shall yet be awakened to direful activity, your correspondent does not venture to predict.

The handsome new building of Rush Medical College is rapidly approaching completion. In magnitude, elegance, and convenience, it is said to excel every other Medical College building in the United States. Were it only possible now to lay aside all fear of competition with the University of Michigan, adjusting the fees to a rational standard, and bringing the course of teaching into conformity with the requirements of an enlightened age, nothing could restrain this rejuvenated institution from its natural position in the foremost rank of American colleges. As soon as the conflict with brick and mortar is ended, it is to be hoped that the representative men of old Rush may be found ready to join hands with those who would have our colleges *express* rather than retard the progress of medical science.

The place of the lamented Amerman in the surgical staff of the County Hospital, has been filled by the election of Dr. Edwin Powell, of this city. Dr. P. is the nephew and successor of the celebrated Professor Brainerd. He served with great distinction in the medical staff of the army during the late war. He has since been connected with Rush Medical College, as Demonstrator of Anatomy, and more recently as Professor of Military Surgery, a position which he resigned to accept the appointment of surgeon to the County Hospital. To this place he brings first class ability, and a reputation second to no other in Chicago.

M.

CHICAGO, August 15, 1867.

LUXATION OF THE ULNA.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—In your issue of August 1st, there appeared a communication from Dr. Stephen Rogers, in which is given a lucid description of "a very rare accident," and its treatment under Dr. Rogers's direction at the Demilt Dispensary.

There appear, also, in various parts of this article, remarks which reflect rather severely upon the previous treatment of the case in question in this institution. I deem this not only undeserved, but also unjust. I was present when the patient first applied at this office for treatment; I heard the diagnosis as given by the surgeon taking charge of the case; I witnessed the reduction of the dislocation and the application of the splint, and also myself, on two different occasions, examined the affected joint and questioned the patient as to her ailment. I feel, therefore, that it becomes my duty to state to the profession my knowledge of the case, and to correct any wrong impression that may have been received upon reading the remarks of Dr. Rogers.

The patient is represented to be an "Irish domestic." Personally, I mention her inability to serve in such a capacity, and especially to perform the severe duty of wringing clothes, which is stated to be the cause of the dislocation. She is sadly deformed—a lateral curvature of the spine so distorting the trunk that the ribs of the right side rest upon the crest of the ilium. Her general appearance would also indicate that she was not capable of undergoing any hard labor.

There is one point upon which Dr. R. is evidently very greatly mistaken. To quote from his letter—"Not satisfied with her progress towards recovery, the patient, after waiting many days, finally came to the Dispensary." Dr. R. also states that the patient "presented herself at the Demilt Dispensary on the 19th of June, 1867." Our books will show that her first appearance here was on the 15th of the same month, or just *four days* before she applied at the dispensary.

The dislocation was reduced, and the splint applied on the morning of the 16th of June. The patient was then ordered to report the next morning. This she

failed to do, and nothing has been seen of her at this institution since the application of the splint.

When the patient first made application for treatment she was particularly questioned regarding the cause of the dislocation. In reply to all queries she said, "it came on, and I do not know any cause for it." The surgeon who was examining the joint then turned, and, in a jocular manner, remarked to myself and some medical students who were present, "this, then, must be a case of spontaneous dislocation of the ulna." It was further remarked, that injuries of a similar nature had not unfrequently been presented for treatment at this institution.

In another part of his letter, Dr. R. states that he "restored the bones to their normal position, but without snapping, sudden slipping, or other usual phenomena of the return of dislocated bones to articular cavities." Precisely the same circumstance was observed when the dislocation was reduced at this office. There was no difficulty of retaining the bones in position—no seeming tendency to a recurrence of the dislocation, and the normal relation of the hand and forearm was perfectly restored when the patient left this institution.

What tampering may have been done by the patient herself, or her friends, during the *three days* that elapsed between the time of the application of the splint and the presentation of the case at the dispensary, I know not. But it is probable that the dressings were removed, and on that account she may have felt a disinclination to return to the institution, where, during the time the case was under treatment, I am satisfied all was done that could be accomplished by the most skilful surgery.

Respectfully yours,

NEWTON M. SHAFFER, M.D.,
Assistant Resident Surgeon.

INSTITUTION FOR RUPTURED AND CRIPPLED,
N. Y., August 15, 1867.

GOOD AIR.

TO THE EDITOR OF THE MEDICAL RECORD.

DEAR SIR—But for the circumstance that the MEDICAL RECORD is much more generally distributed than the "Transactions of the Academy of Medicine," I would not trouble you to state that in your notice of my paper on *The Economy of Human Life*, in your last number, I am incorrectly reported as maintaining—"that proper food was much more important than good air, or the most salubrious surroundings."—While I do think, and endeavored to show in my paper, that insufficient food in child-bed is a fruitful source of ill health to mothers, and that poor and insufficient food is a fruitful source of mortality among infants and children, I am, nevertheless, far from maintaining that anything is or can be more important to health than good air.

Truly yours,
A. N. BELL.

BROOKLYN, Aug. 19, 1867.

NEW USES OF MICA.—Mica coated with a silver film is now used in this country for large reflectors. Puscher of Nuremberg has suggested the employment of silvered mica for covering curved surfaces, the flexibility of mica giving it great advantages over glass. After being heated, mica loses most of its flexibility, but it then makes a beautiful material for inlaying work. A pretty effect is obtained by scattering small fragments of mica on freshly poured sheets of gelatine, and varnishing it with a dark solution of gelatine. Finely ground mica mixed with a solution of gum arabic may be used for a silver ink.

Obituary.

CHARLES E. MORGAN, M.D.,

NEW YORK.

DIED, on August 4th, 1867, Charles E. Morgan, M.D., in the 34th year of his age, of acute diarrhœa and hæmorrhage of the bowels, after an illness of five days.

In Dr. Morgan, the profession loses one of its most cultivated and able members. His studious habits, and his enthusiastic devotion to science, occasion a profound regret that his life was so short.

His career as a scholar must have commenced very early, as we hear of his prosecuting the study of mineralogy at eleven years of age, under the care of the late Dr. Francis Hawkes, and of the production of a work on natural philosophy at the age of seventeen. In 1854 he graduated at Columbia College, and in 1857 received the degree of Doctor of Medicine at the College of Physicians and Surgeons. He then spent seven years in Europe in the study of medicine and the collateral sciences, under such men as Bernard, Robin Le Compte, Virchow, DuBois-Reymond, and Hoppeseiler.

He returned in 1864, and few were better fitted for their life-work than he.

Since his return he has been engaged in the practice of his profession, giving special attention to diseases of the skin, on which he has frequently lectured; and during the last two years he has occupied a chair on diseases of the skin at the Northern Dispensary, which, we may affirm, was never more honorably filled.

Within this time he had completed a work entitled "Electro-Physiology and Electro-Therapeutics, including an Account of the Electric Fishes," which is in press, and for which he traced on the blocks most of the cuts. Undoubtedly his book will do much towards giving electricity its proper importance in the practice of medicine, which it certainly has not enjoyed heretofore. To illustrate the quiet confidence the Doctor entertained of the thoroughness of his work, it may be worth remarking that about a year since he was urged to complete his book, as it had been a long time in course of preparation, in fear that some one else might publish a similar work in advance of his; to which he replied: "I have no fear of that; there are many points considered in my book which no one else will think of." The statement was so thoroughly founded in fact as not to be in the least degree immodest.

He had contributed somewhat to the medical journals, and had read by invitation an article on diseases of the skin before the Medical Journal Association, a few months since, which appeared some time since in our columns.

He had many projects on foot, and seemed to feel that his mission pointed towards original investigations in medicine, more especially to physiology, as he could devote most of his time to such matters, not being under the necessity of practising medicine for a livelihood. He was not a member of any medical association, and although proposed for the American Microscopical Society, he had not joined it. He seemed to entertain an idea, which had too much foundation in fact, that some of the older medical societies had reached their fossiliferous stage of development, and should give place to younger institutions. In fact, he had made efforts to found a new society, which, unfortunately, had not been crowned with success.

It was a rule with our lamented brother "to do whatever his hands found to do with his might," never thinking that aught worth doing at all should be done less than thoroughly well. As a microscopist he hardly

had a superior in this country. Although an excellent linguist, speaking four or five different languages, he was perhaps more able in mathematics and the physical sciences, of which he was especially fond. He added to all these acquirements a good knowledge of painting.

If he had any mental fault, it was perhaps in overburdening a subject with information—presenting more facts than could be well managed, in his great desire to treat things exhaustively; but as this is an error on the safe side, and as age would have corrected the tendency, we could not but be lenient towards it.

It may not be amiss to state that although he was ambitious to achieve for the sake of the good, he was much stimulated in his work by the pleasure a kind and indulgent mother, his sole surviving parent, experienced in his successes.

Towards his professional brethren, he ever maintained a courteous and modest bearing, which never asserted superiority to the humblest member; ever ready to assist any who loved the science to which he had devoted his life, and tempering all his actions with the gentle grace of the Christian. Let us feel certain that he has received the plaudit, "Well done, good and faithful servant."

His funeral was attended by the medical staff of the Northern Dispensary, at St. Bartholomew's Protestant Episcopal Church, of which he had for years been a consistent member. After which, a meeting was held by the physicians, and resolutions of sympathy and condolence passed, which were sent to his family, and ordered to be printed.

New Publications.

BOOKS AND PAMPHTETS RECEIVED.

A TREATISE ON HUMAN PHYSIOLOGY, DESIGNED FOR THE USE OF STUDENTS AND PRACTITIONERS OF MEDICINE. By JOHN C. DALTON, M.D., Prof. of Physiology and Microscopic Anatomy, in the College of Physicians and Surgeons, etc., etc. Philadelphia: H. C. Lea. 1867.

A TREATISE ON EMOTIONAL DISORDERS OF THE SYMPATHETIC NERVOUS SYSTEM OF NERVES. By WILLIAM MURRAY, M.D., M.R.C.P., London, etc. New York: A. Simpson & Co. 1867.

THIRTY-FIRST ANNUAL ANNOUNCEMENT OF THE MEDICAL DEPARTMENT OF UNIVERSITY OF LOUISVILLE. 1867.

NINTH ANNUAL ANNOUNCEMENT OF THE CHICAGO MEDICAL COLLEGE.

NINETEENTH ANNUAL CATALOGUE AND REPORT OF THE NEW ENGLAND FEMALE COLLEGE. Boston. 1867.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF KANSAS, for 1867.

MEDICAL COMMUNICATIONS TO MASSACHUSETTS MEDICAL SOCIETY. Vol. XI., No. 1., for 1867. Boston. 1867.

Medical Items and News.

COLLEGE OF PHYSICIANS AND SURGEONS.—Dr. Bumstead has resigned the post of Lecturer upon Materia Medica at the College of Physicians and Surgeons, and Dr. James W. McLane has been appointed in his place.

Dr. Bumstead has accepted the appointment of Professor of Venereal Diseases at the same College.

THE BRITISH MEDICAL ASSOCIATION, during the past month, held their annual conference in Dublin, Dr. Stokes, Regius Professor of Physic in the University of Dublin, and President of the King's and Queen's College of Physicians, being the presiding officer. The arrangements for the scientific portion of the business were more complete than on any former occasion. Trinity College and the Colleges of Surgeons and Physicians conferred degrees on the most distinguished guests. An invitation to hold the next annual conference at Oxford was accepted, and Professor Cleland nominated as president. In the opening address on "Medicine," Sir Dominick Carrigan impressed the necessity for greater stringency in registration laws, and censured the facility with which diplomas could be purchased in the United States and in Germany.

MUSTER OUT OF SURGEONS, U. S. V.—The following surgeons of the United States Volunteers, who have been on duty in the Bureau of Refugees, Freedmen, etc., are ordered to be honorably mustered out of the United States service:—J. J. De Lamater, A. C. Swartzwelder, W. R. Dewitt, M. K. Hogan, Charles J. Kipp, J. W. Applegate, and Patrick Glenan. Dr. Robert Fletcher, Surgeon, United States Volunteers, is also ordered to be honorably mustered out. The order leaves but one surgeon, U. S. V., in service. The few vacancies existing in the regular corps will probably soon be filled.

THE AMERICAN PHARMACEUTICAL ASSOCIATION will hold its annual meeting at the University Building in this city, September 10th, 1867.

DEATH OF DR. J. MASON WARREN OF BOSTON.—Dr. Warren died of internal cancer complicated with intussusception, August 19th, in the 56th year of his age.

REPORT OF THE EXAMINATION OF VESSELS ARRIVING AT NEW YORK.—There has been compiled at the statistical bureau of the Treasury Department an abstract of the report of the examinations of vessels having on board passsengers other than cabin passengers, which have arrived at the port of New York during the month of June, 1867, from which it appears that the total number of vessels examined was eighty-six, of which forty-two were steamships and the remainder sailing vessels. The average length of the steamship voyages was thirteen and two-third days, and of the sailing vessels thirty-nine days. The total number of passengers brought was 39,078, of which 22,822 were males; 6,566 were under eight years of age. The total number of deaths was 117 males and 59 females. Of the entire number 84 were under eight years of age. The abstract states the mortality of the adults was not unusual, but that of the children calls for investigation, being nearly one and one-third per cent. of the whole number brought over. A number of the vessels brought more steerage passengers than the law permits, and in several instances they were reported for prosecution. A report concerning the Hamburg ship John Bartram, shows that nineteen deaths occurred, of which six were children, and that they were caused by bad water and food, and want of care and attention.

METEREOGRAPH.—Among the objects of great interest to scientists in the Paris Exposition were the diagrams made by the instrument invented by Father Secchi of the College of Rome, for registering automatically the changes in the temperature, pressure, moisture, and the motion of the atmosphere.

YELLOW FEVER IN TEXAS.—The epidemic of yellow fever which has been raging in Indianola and Lavacca, Texas, according to the latest advices of the secular press is now on the decline.

Original Communications.

INTRA-LARYNGEAL SURGERY.

By J. SOLIS COHEN, M.D.,
OF PHILADELPHIA.

No. II.

THE APPLICATION OF SOLUTIONS TO THE UPPER AIR-PASSAGES.

Local applications to the throat are most frequently made in the form of solution. They are applied by means of a mop, sponge, or soft brush; or by means of a syringe, or douche; or broken up into a fine mist by means of the nebulizer. The first of these methods is that most generally employed, the sponge being used more frequently than the mop or the brush. If a brush is employed, it should be one formed of a good quality of camel's hair, or badger's hair, and should be well made. Brushes, made of glass, are occasionally employed with corrosive solutions, but there is always danger of the occurrence of injury or embarrassment from the detachment of some of the glass filaments, an occurrence, however, which is said to be infrequent. I have never used these, preferring to have a good camel's-hair pencil destroyed, to running any risks with such brittle material.

The most suitable substance for the application of solutions in the great majority of cases, is a small piece of soft surgical sponge of the finest quality. It must be strong enough to resist a good deal of tension without tearing, in order to avoid liability of its being caught and torn off, so as to cause mischief. When large surfaces are to be washed over, a long-haired brush, the hair of which may extend an inch or an inch and a half from the quill portion, and squeezed at the free end, will be more suitable than the sponge, especially when the parts are very sensitive and the friction of the sponge would produce more irritation. Where a small circumscribed spot is to be touched, a delicate fine-hair pencil answers the purpose. For a general application, if a hair pencil be employed, it should be large enough to take up from five to fifteen minims of fluid. If a decided contact with a diseased surface is desired, such a contact as is produced by moderate pressure, a sponge will be the most advantageous, as it will better allow of pressure; and if it is intended that the application should force a portion of the fluid out upon the diseased surface, the object will be better accomplished with the sponge, as it can be made to absorb a larger quantity of fluid than can be taken up by the brush. In certain cases, a mop, made by unravelling portions of a strip of linen, will be the most convenient medium of application.

Whatever material be employed, care must be taken to see that it is firmly secured to a staff, so there will be no chance of its becoming separated, and this is especially to be guarded against when the interior of the larynx is to be operated upon. A stout piece of whalebone, about the thickness of a writing-quill, and of the proper length and shape, forms the most ordinary stem, and is very convenient. A stout wire of silver, or German silver, firmly secured in a wooden or other handle is also often used, and is perhaps preferable to the whalebone on account of its greater rigidity, besides which the shape of the curve can be readily altered to meet varying indications. The whalebone staff can be bent to any desired shape by first dipping it into boiling water, and allowing it to remain there a few moments; if it is allowed to remain in the hot water too long, it will become too flexible, and curl round like a piece of tape; should this occur, it may be hardened again by immersion in cold water. If the stem to be used be of hard vulcanized rubber, it can be given the desired curve by previous immersion in hot water, or by holding it over a flame for a few minutes. A bit of sponge may be fastened to the probang in several ways; by sewing it on through holes drilled through the extremity of the stem, or by tightly winding a thread round and round it, in which case, the extremity had better be a little bulbous. The plan which I prefer, is to have three grooves cut round and round near the extremity of the stem, and to wrap around the sponge iron wire forced into the grooves, which forms a very secure attachment, less liable to become acted upon by the corrosive solutions than threads of cotton or silk, and thus allow the sponge to be pulled off. A brush may be firmly attached to a stem, by dipping the quill portion, which should first be cut down so as to be no longer than is absolutely necessary, into hot water until it becomes moistened into pliability; then, while in this condition, it is to be placed upon the stem and tightly bound into the grooves by thread or wire.

Another method of employing a brush or a sponge, is to use a staff terminating in a two-bladed forceps, serrated and furnished with prongs, so as to hold on firmly to the brush or sponge, the grasp upon which is tightened by a ring screwing over the forceps, or compressing the blades by a strong bayonet-catch. If desirable, this stem can be made flexible so as to avoid injury to the patient when making an involuntary movement at the moment the instrument is within the larynx, and also to facilitate pushing it on through the glottis against a patient's resistance. Another plan is to seize t e sponge between the blades of a pair of laryngeal forceps with a spring-catch in closing, so as to prevent separation of the blades while the instrument is in use. I am in the habit of employing a delicately made, properly curved spring forceps, acting in the same manner as the artery spring forceps, in which compression of the handle separates the blades which are tightly pressed together by the recoil of the spring, holding the brush or sponge with a firm grasp; and which can be held between the thumb and fingers exactly in the same manner as if it were a sound or probang. If it is deemed desirable to employ a more delicate sensation of touch than can be conveyed by an instrument held between the thumb and fingers, the staff, which should then be much shorter, may be screwed on to a thimble fitting the forefinger as in Fig. 1, which will thus convey the tactile sense with more distinctness. When the sponge is not attached, the instrument becomes a sound. Dr. Elsberg, of New York, has adapted for the same purpose, a spring-ring for the terminal phalanx of the forefinger, like the ring to which the conjunctival scarificator is sometimes attached; to this ring is rivetted a stem composed of two pieces of watch-spring bent to the proper shape, the extremities of which are forked by having a V-shaped piece cut out, so as to prese two sets of prongs, which are bent at a right a

Fig. 1.

towards each other, so as to grasp the sponge when placed between them; a slide passing round the two springs, and a jam sliding between them keep the teeth firmly fixed in the sponge. This instrument is flexible enough, and readily communicates the sensation of touch to the finger. Sponge-holders are preferable to to any sort of probang, because they admit of ready removal, and removal of bits of sponge; so that the same piece need not be used twice, even upon the same individual.

The size of the sponge will vary according to the use to which it is to be put; for circumscribed applications it should be no larger than absolutely necessary; for general application, and where it is intended to press some of the fluid out of the sponge, it should be much larger; if it is to be passed between the lips of the glottis, it should not be larger than a good-sized pistol-bullet, and should be somewhat egg-shaped, so as to facilitate its passage. Every time a sponge is to be used, it should be pulled upon, to see that it is firmly attached to the stem or holder; before use, it should be dipped into plain water, and after becoming saturated should be squeezed dry, so that it will absorb plenty of the medicated solution when dipped into it. Before making an application it is well to press against the parts a soft bit of sponge from which plain water has just been squeezed, in order to remove from the surface any secretions or deposit, and thus secure more thorough contact of the remedy to the diseased structures. In cases of ulcerations in chronic laryngitis, especially of the scrofulous and syphilitic varieties, where there is considerable dysphagia, the difference in result from attention to this particular, and neglect of it, will be found very marked.

No special rules are necessary to be given for the application of a sponge or hair-pencil to the portions of the throat anterior to the larynx; they can be readily exposed and swabbed. Care should be taken to make the application as swiftly and gently as is consistent with thoroughness; there is little to be gained from the employment of force; a little manipulation will soon accustom the parts to the presence of a foreign substance.

For making applications to the lingual surface of the epiglottis, its border, some portions of its laryngeal surface, the upper portion of the laryngeal aperture, and the mucous membrane covering the cartilages of Santorini, it is not always necessary to employ the laryngoscope. If a well-constructed tongue-depressor be employed, of such shape as described in a previous article (see the MEDICAL RECORD, Vol. I., p. 348), it will often be found practicable to force down the base of the tongue in such a manner as to expose a considerable portion of the epiglottis, and not infrequently its entire lingual surface. This requires a little knack, perhaps, in the handling of the depresser, but is very readily acquired. The instruction I give my pupils is, "Press the base of the tongue downwards and forwards as if you were going to force it out under the chin. The patient should sit opposite a good light, natural or artificial, direct or reflex, so that when the mouth is well opened the fauces are well exposed; and the operator should stand in such a manner as to look down upon the pharynx from above, not to look into the mouth horizontally; then the tongue-depressor is to be applied so that a firm hold is taken on the base of the organ, and the effect is to be made again and again to depress the tongue sufficiently; as long as each attempt exposes more and more of the posterior pharyngeal wall, it is safe to continue the manipulation, and finally the crest of the epiglottis will be seen behind the tongue, and repeated efforts may expose its entire glossal surface. If this method be unsuccessful, the epiglottis may be touched or titillated with the extremity of the tongue-depressor, which will induce reflex movements of choking, so as to raise the larynx, and then the larynx can be raised sufficiently, sometimes, to expose a large portion of the aditus laryngis. While this manœuvre is being accomplished with one hand, the proper application can be made with the other to any morbid appearance. The same manœuvre suffices for making applications to ulcers, or other morbid appearances upon the pharynx, which may have been discovered upon laryngoscopic examination. Where morbid processes cannot be exposed in this way, it will become necessary, of course, to have recourse to the principle of reflexion. For a general application to the interior of the larynx or trachea, recourse to the laryngoscope is not absolutely necessary, though more safe than the method introduced with so much success by the late Dr. Horace Green, of New York.

Before making any effort to introduce an instrument within the cavity of the larynx, however, it is exceedingly desirable to become familiar with the exact position occupied by the epiglottis, for this valve is sometimes quite erect, and at others very much depressed; indeed, it is a matter of question in certain medical circles whether a physician is at all justified in making an attempt to pass an instrument into the laryngeal cavity without previously satisfying himself of the normal position of his patient's epiglottis. Where a laryngoscope is at hand, the point in question can be very readily determined; where such an instrument is not of convenient access, the attempt should be made to expose the epiglottis by the method described above; should this fail, the forefinger of the operator, or a strong bent probe should be employed as a lever to keep down the base of the tongue, and if not successful with the tongue retained within the mouth, the same means may be tried with the tongue extended, care being taken to interpose something between the lower teeth and the tongue, so as to prevent injury to the organ from pressure on the incisors. Should this method fail, the forefinger should be passed along the base of the tongue until it reaches the epiglottis, which will be easily recognised by the touch, with which sense its position can be determined also. In such cases the epiglottis may be pulled forward by the forefinger of one hand, which can be used as a guide for the passage of an instrument, over the finger and epiglottis into the larynx; and this method is often the only one at all practicable in making applications to the larynx of the child, in which cases the mouth may be kept open by a mouth-distender or speculum; or the precaution should be taken to protect the forefinger and hand by a towel or handkerchief from unpleasant impressions of the little one's teeth.

The readiest method to pass the probang into the larynx without the use of the laryngoscope, is as follows:—First, determine the position of the epiglottis in the manner described, or any other manner; then depress the tongue with a strong tongue-depressor; if it exposes the epiglottis, so much the better; as the patient takes an inspiration pass the instrument in the middle line until its point has passed behind the position assumed by the epiglottis; then telling the patient to make a prolonged sound of the diphthong œ, depress the base of the tongue by a movement which shall drag it forwards at the same time, and sink the point of the probang downwards and forwards by a vertical movement of the wrist, which shall bring the back of the hand all but in contact with the patient's face. If it is intended to pass the glottis, the patient must be directed to take an inspiration at the moment the probang enters the larynx; this opens the glottis, and permits the pas-

sage of the instrument. The moment the instrument has entered the larynx, spasm takes place, the epiglottis shuts down like a trap-door upon the foreign body, and the patient feels and exhibits the symptoms of impending suffocation. In withdrawing the instrument, the resistance of the epiglottis is felt; and if it has passed the glottis the resistance of its lips will be previously distinguished. The sense of constriction usually described as proof of entrance, and ascribed to the spasmodic closure of the glottis in withdrawing the instrument, is usually due to the pressure of the epiglottis upon it, as I have repeatedly verified with the laryngoscope, during my own manipulations. The distress caused by the first passage of the glottis by a probang is often extreme in degree, the sense of suffocation remaining for some time; but it becomes less and less at each succeeding application, until eventually nothing ensues but a slight paroxysm of cough, sometimes a mere clearing of the throat. If the glottis has been passed, and it is desired to swab the trachea, a single motion down the tube and out again is all that is requisite; to move the probang up and down two or three times, as if the windpipe were a "chimney flue" requiring cleansing, is a procedure as unnecessary as it is inelegant. In persons with thin necks, the passage of the sponge down the trachea can be seen through the integument. The right bronchus has been swabbed in in this way by Dr. Horace Green, and others, and even a tube has been passed into this bronchus for the purpose of throwing in an injection. I have never had occasion to make an attempt of this kind, but I have repeatedly reached the bifurcation of the trachea of a lady who was relieved by this method of a chronic laryngo-tracheitis, said to be of nearly forty years' duration.

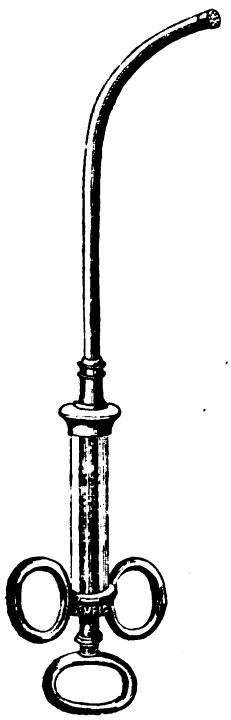


Fig. 2.

The substances most frequently applied by the sponge, mop, or brush, are solutions of nitrate of silver, sulphate of zinc, sulphate of copper, chloride of zinc, tannic acid, persulphate of iron, etc.; the nitrate of silver being employed most frequently. The method of treatment is applicable to cases of chronic laryngitis, follicular and ulcerative; laryngo-tracheitis; pseudo-membranous laryngitis; syphilitic affections of these parts, etc. In withdrawing the sponge, the tongue and pharynx are often touched involuntarily, and this excess of fluid may be removed in part by gargling with suitable articles, such as salt and water after nitrate of silver, milk and water after iodine, etc.

In cases of limited ulcerations, moist excrescences, etc., where the application is to be limited to the points diseased, they are to be made with the aid of the laryngoscope. If a mere momentary contact is required, a very fine hair-pencil may be employed; if longer contact is requisite, it should be made with a small piece of sponge, no larger than is absolutely necessary, fastened in an appropriate sponge-holder. The hair-pencil is more apt to permit a drop of fluid to fall from it, and this may drop into the larynx before the application is made.

Another method of applying liquids to these structures is by means of the syringe. The so-called catarrh-syringe, manufactured by the Hard-Rubber Company, may be employed for this purpose, but the barrel is so large as often to obstruct the view. The most convenient instrument is the syringe of Tobold, Fig. 2, the nozzle of which is of hard rubber, with a silver tip perforated by several holes to permit of the better distribution of the fluid. The barrel is of glass, and if desired, the piston-rod can be graduated so as to permit of great accuracy in the amount of solution to be employed, if this point be deemed of consequence. The rings on the barrel are for the first and second fingers; the ring on the piston-rod for the thumb. Its manner of employment is obvious. This instrument is sometimes made with a laryngeal mirror in the curve, and the contents are projected from several apertures, which open on the rim of the mirror. A somewhat similar combination of laryngoscope and syringe has been devised by Binz. Türck's syringe is similar to Tobold's, but the nozzle has but a single aperture, over which a bit of sponge is tied. It is used in the same manner; but by merely dipping the sponge into a solution without drawing up any of the fluid by the piston, it can be used as a probang.

For the administration of a douche into the larynx, etc., in the form of a very fine spray, and which shall irritate the parts less than an injection from a syringe, the best instrument which has been devised is the laryngeal douche of Gibb (Fig. 3), which consists of a silver tube, with the proper laryngeal curve, to the free extremity of which there is screwed on a platinum bulb, perforated with a number of openings so fine that they cannot be seen without the aid of a lens; the straight end of the tube is fastened by silver wire within the neck of a little rubber ball. The instrument is charged by dipping the bulb into the solution while the ball is compressed, and then releasing the ball until a sufficient quantity has been drawn into the tube. In employing the instrument, it is held by the neck of the ball, between the middle phalanges of the first and second fingers, the ball of the thumb being applied to the base of the ball, and when it has been placed in position it is discharged by compressing the ball with the thumb. The spray produced is as finely divided as that made by the various nebulizers in use, for purposes of preparing solutions for inhalation, and the contact of the spray produces less spasm than any other method of medication. It is admirably adapted to making a general application to the larynx or trachea, especially valuable when the structures are very sensitive or irritable, and contact with the sponge or brush would induce pain, and it can therefore be employed when the use of the sponge would be impracticable.

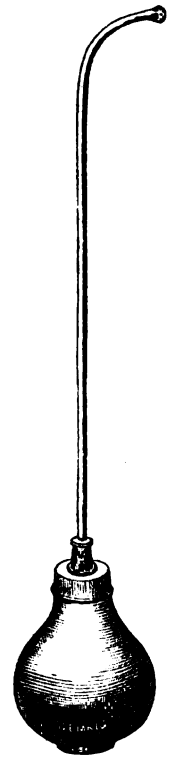


Fig. 3.

These syringes and douches can be employed for introducing solutions into the larynx, when the depression of the epiglottis is so great as to preclude admission

to a sponge or hair-pencil. The method of treatment is applicable to cases of general inflammation, acute or chronic; to alterations of structure; inflammatory affections of the vocal cords and pseudo-membranous laryngitis. Dr. Gibb, in the last edition (London, 1864), of his work on *Diseases of the Throat and Windpipe*, states, p. 232, that he has recently employed the spray of a solution of nitrate of silver (thirty grains to the ounce), as an injection into the larynx and trachea in croup, and the severity of the symptoms were so speedily diminished that he almost doubted whether the disease was actually croup! yet all the well-marked symptoms were present.

By causing the patient to utter a vocal sound at the moment of projecting the fluid from the instrument, we avoid its entrance into the trachea in affections of the vocal cords and parts above them. I have frequently succeeded in overcoming paralysis of the muscles, moving the vocal cords in that form of aphonia, known as functional, by means of an application of the spray of sulphuric ether from the laryngeal douche; and I have also employed for this purpose solutions of iodine, nitrate of silver, and astringents, with satisfactory results, as have also followed the use of the same remedies applied by the sponge. The mechanical effect of the sponge or the douche has doubtless had much to do with the effect, though some amount of credit must be allowed to the stimulus which was employed with them. When ether is used with a douche of this kind, or with a syringe made from vulcanite, the solvent action of ether upon rubber must not be forgotten, and eventual destruction of the rubber portion of the instrument must be expected.

Another method of applying a douche to the larynx is by means of some modification of the Bergson insufflator used for the nebulization of liquids. These tubes are so arranged as to be readily introduced within the larynx, where the distribution of the nebula takes place; or they are so constructed that they can be held over the laryngeal entrance, and the spray be propelled into the larynx without contact of the instrument with that tube. One of the best instruments of the latter kind, and one which can be used by those who would be unable to pass an instrument into the larynx, is the spray-producer of Maunders (see illustration, MEDICAL RECORD, Vol. i., p. 219). This instrument consists of an India-rubber ball, perforated at its base, so as to admit of instantaneous refilment of air when emptied; an upper or air-tube communicates horizontally with the ball, and terminates at its other extremity in a capillary opening, turned downwards just far enough to cover the capillary extremity of a second tube running under the first one; this lower tube at its other end does not communicate with the ball, but dips down into a small vial, which slides upon a pin fastened to the upper tube. In using the instrument the vial is partially filled with the solution to be employed; the instrument held much as the laryngeal douche, between the first and other fingers, is passed into the mouth, until its point all but reaches the posterior wall of the pharynx, and then the ball is compressed by the thumb, which forces the air to escape through the upper tube, while, in passing, the capillary aperture of the lower tube creates a vacuum, forcing the liquid to issue from the little reservoir, and, as it escapes, this liquid is propelled downwards, in the form of spray. By altering the direction of the capillary extremities of these tubes, the spray may be forced in any desired direction. I notice that many of these instruments, as the laryngeal douche and spray-producer, as well as the insufflator, to be described subsequently, are furnished with an egg-shaped rubber ball, similar to those in certain forms of anal syringes. These balls have to be held in the palm of the hand, and then compressed by closing the hand upon them, a motion which invariably disturbs the position of the point of the instrument to a considerable extent, and necessitates a very awkward manner of introducing the instrument. The shaped ball I employ is seen in Fig. 3, in connection with Gibb's laryngeal douche.

Still another method of introducing solutions is that of Von Bruns, who uses a properly curved tube, drawn at one end to a fine aperture; to the other end a piece of rubber tubing is attached. The fluid is drawn up by suction with the mouth, and discharged by blowing through the tubing, an inelegant method of procedure.

All these instruments are improvements upon the method of Trousseau and Belloct, who employed an anal syringe for this purpose, and of Erichsen, who also invented a laryngeal syringe.

By turning these instruments round, or upside down, as it were, and altering the curve if necessary, they become converted into naso-pharyngeal syringes, or douches, for the treatment of affections of the posterior nares and naso-pharyngeal space.

In using corrosive solutions, as of nitrate of silver, acid nitrate of mercury, etc., the portion of the instrument with which the material comes in contact should be of gold, platinum, glass, or vulcanite.

Solutions adapted to the treatment of chronic affections of the upper air-passages should be strong; for instance—of nitrate of silver, grs. 40, 120 to the ounce of water; sulphates of copper and zinc, grs. 30, 80 to the ounce; chromic acid, grs. 40, 120 to the ounce, etc. Weaker solutions are not of much service. If a stronger application is required, the sponge may be moistened, and then rubbed upon the salt, so as to secure a very concentrated solution. For syphilitic affections, the best local application is a solution of the acid nitrate of mercury, one part to from five to twenty of water, according to the indications. Where an application is made, a second application is not usually necessary until all beneficial action from the first has ceased, which may be one, two, or three days, or longer, according to circumstances.

A NEW MODE OF TREATING UMBILICAL HERNIA OF INFANTS.

By A. G. FIELD, M.D.,
IOWA.

IN the treatment of a case of umbilical hernia in an infant, some time since, I experienced but little benefit from the usual appliances, and finally resorted to the use of adhesive strips only, with which a radical cure was effected.

Since then, the plan has been adopted with success in the treatment of other cases, and its simplicity may justify its publicity, and induce others to give it a trial. It is based upon the assumption that there are two indications to be met: the support of the parietes of the abdomen, and the production of a plastic exudation at the point of injury.

Two strips of adhesive plaster of sufficient length are to be applied to the abdomen, each reaching from the crest of the ilium on one side to the hypochondrium on the other, both crossing over the umbilicus. In the application of each, the umbilicus is to be pressed well down by the finger of the surgeon, while the strip of plaster, one end of which having been previously attached, is drawn firmly over it, and secured, so as to cause an inward fold of the integument at the point of injury, thus closing the aperture, and at the

same time constituting a *pad* of the corrugated tissues of the abdominal wall.

By re-applying the strips when they became loosened, and continuing the treatment a few weeks, radical cures resulted.

ON SOME OF THE INDICATIONS FOR THE

USE OF THE EUSTACHIAN CATHETER.

By O. D. POMEROY, M.D.,
NEW YORK.

THERE seems to be a wide-spread prejudice against the use of the Eustachian catheter, especially amongst general practitioners. In looking over works on the diseases of the ear, much will be found in condemnation of this practice; even if it is admitted to be occasionally justifiable, the dangers from its use are so dilated upon, as to frighten any but the boldest from attempting catheterization.

More frequently is this the case with English writers; and American physicians, regarding them with greater favor perhaps, are especially in danger of adopting such erroneous notions.

The Continental surgeons, however, almost unanimously favor its use.

Perhaps one cause of this wide-spread fear of catheterization has arisen from two cases, supposed to have been killed by its use in London, more than twenty years since, and reported by Turnbull, of which Mr. Troltsch remarks: "It is hard to see, from the published account of the autopsy, how the accident occurred." In spite of this, however, it has been quoted in almost every book on the subject since. Two cases by Troltsch, and one by Pitcher, have been recorded, in which emphysema, more or less extensive, has resulted from the use of the catheter; the air being again absorbed, without serious consequences. Occasionally laceration of the mucous membrane and moderate hæmorrhage have resulted.

I have not heard of a case from any surgeon in this country, in which mischief has been done by the catheter when judiciously used. In fact, American surgeons have in public assemblages declared that they have been prejudiced against the use of the catheter, but employ it much more frequently now than formerly! My own experience in the matter may have been sufficient to give me a prejudice for or against its use. I have never met with a single untoward accident; occasionally a little pain has been caused, or the most trifling hæmorrhage. In the case of children, it will be somewhat more difficult. My own practice is to hold the child's head firmly between the knees, when, in spite of struggles and cries, we may succeed in its introduction. (The best mode of introducing the catheter is Kramer's, described in Troltsch's work on the ear, translated by Dr. Roosa.) Politzer's apparatus has superseded the catheter in a great number of cases, and when it succeeds, of course catheterization is unjustifiable. Many times a patient presents himself with only one ear affected; the tube may be so impervious as not to allow an interchange of air between the throat and cavity of the tympanum; you very properly try inflation by the Politzer apparatus and succeed—at the expense of injuriously inflating the well ear, or you do not succeed at all, and must eventually use the catheter; you wish to inject medicated vapors or gases, and the injection goes into the well ear more than into the diseased one, most likely doing mischief; you will not then hesitate to use the catheter. Again, Sir Astley Cooper is reported by Sir William Wilde to have said, "Whenever the patient is himself able to inflate the tympanum, never use any artificial means to do so; it is unnecessary, and may be injurious."

Within a few days I have observed a case which disproves this proposition. The patient was somewhat deaf in both ears from myringitis and inflammation of the cavity of the tympanum, with partial closure of the tubes, worse in the left, to which treatment was principally directed. He could inflate both tympani easily, although that was not the case at first, by holding his nose and making a forced expiration; still there was no improvement in the hearing of the left. I then tried the Politzer, which forced in the air much more strongly, so much so as to cause momentary pain and deafness to the right ear, without improvement in the other; I then tried the catheter in the left, and by vigorous pumping of air through it, succeeded in much improving the hearing. The membrane had, by the inflammatory thickening, become so rigid and immovable as not to be pressed into a normal position (it having become sunken by the disease), except by the catheter.

A new method of treating diseases of the cavity of the ear by means of a medicated spray, in the same manner as in inflammations of mucous membranes elsewhere, has been devised, and to accomplish this, the spray *catheter* must be used; so we infer that any person practising aural surgery, with anything like thoroughness, must needs use the catheter, if not frequently, occasionally, and I am confident that every man capable of using this instrument with even a moderate amount of skill, must coincide with this.

Reports of Hospitals.

BELLEVUE HOSPITAL.

POLYPUS OF THE RECTUM.

By D. McLEAN FORMAN, M.D.,
HOUSE SURGEON.

POLYPUS of the rectum, although a somewhat rare disease, is an important one to be acquainted with, inasmuch as it often produces most severe symptoms, and at the same time is easily remedied.

The most simple form in which a polypus is seen, is where there are one or more short processes, as it were, of the mucous membrane standing out prominently in the cavity of the rectum. These bodies are usually situated in the cavity of the rectum above the internal sphincter, produce little uneasiness, cause very little inconvenience, and therefore do not demand the attention of the surgeon.

A form of polypus very rarely met with is where the growth is warty, composed of an aggregation of small lobes arranged upon a peduncle, just like a bunch of grapes, and upon microscopical examination being chiefly or entirely epithelial.

The vascular polypus is, perhaps, of most frequent occurrence; it is chiefly met with in young children. The tumor varies in size from a cherry to a pea; is of a bright color; its structure is fibro-cellular and eminently vascular. It is usually situated within a short distance of the anus. The symptoms which this form of the disease produces is the prolapse of the tumor when the patient evacuates his bowels, and hæmorrhage of a more or less profuse character. The occurrence of this loss of blood in a child should lead to a careful examination of the rectum, for if the tumor be seated high up it will recede after evacuation of the bowels, and thus escape observation. It is necessary,

therefore, to make the examination immediately after the evacuation of the rectum by medicine or an enema.

CASE OF POLYPI OF THE RECTUM.

Wm. H——, æt. 16 years, was admitted to Bellevue Hospital, July 22, 1867. The patient is a pale, anæmic, sickly-looking boy, has an anæmic cardiac murmur, œdema of both lower extremities, and is very weak. Urine healthy. He states that he has been troubled with a protrusion of the bowel when he goes to stool ever since he was a little boy. At times he has profuse hæmorrhage from the bowels and is greatly prostrated thereby. He complains of pain in his back, and says he has a good deal of pain about the anus when he evacuates his bowels. Soon after admission an enema was administered, and he was directed to force down all the rectum he could. Upon examining him after the enema, there was found to be a flesh-colored mass about the size of a man's fist, presenting very much the appearance, except in color, of the head of a cauliflower, protruding from the anus. Upon examination, this mass was found to be composed of the mucous membrane of the rectum, and several hundred polypi, varying in size from a pea to a very large bean, attached to the mucous membrane by small pedicles, the interspaces being filled with a gelatinous mucus. Upon removing several of the smallest ones for examination, they were found to be extremely vascular, and in texture fibro-cellular. Upon introducing the finger in the rectum, apparently healthy mucous membrane could be felt above the polypi about an inch above the sphincter. This mass of polypi and mucous membrane protrude from the anus every time the boy has a passage from his bowels, and frequently bleed when he walks about, but are easily reduced by himself, several ounces of bloody mucus escaping after each reduction.

Treatment.—Good nourishing diet; syrup ferri iodidi and quinine.

July 31.—Patient is suffering a good deal from his disease, and his general condition is now extremely bad and becoming worse every day. To-day, the patient being seen by several of the attending surgeons, Dr. Sands, at their approval, ligated the mass by passing several strong ligatures through it near the junction of the healthy and diseased mucous membrane, tying them tight so as to strangulate it. After the whole mass had been included in the ligatures, most of the polypi were removed with the scissors and the rest returned within the anus. *August* 1.—The operation has been followed by a good deal of constitutional disturbance. Pulse 140 to 160, and very weak. Skin hot and dry. Tongue a little dry and furred. Complains of pain about the anus. He is kept moderately under the influence of stimulants and opium. *Aug.* 2.—There is but little change in his condition; he has vomited several times during the day. *Aug.* 3.—The patient is better to-day. Has no evidences of peritonitis. Bowels moved three times last night; none of the polypi were voided in the stools. Still complains greatly of soreness about the anus. *Aug.* 14.—Patient has improved daily, several of the ligatures having come away, and to-day several polypi were passed with the contents of the rectum. *Aug.* 23.—Upon introducing the finger in the rectum, one large and several small polypi can be felt, but they give him no trouble, and he is unable to protrude them. He has had no more hæmorrhages since the operation. There is no evidence of a stricture of the rectum. His health is greatly improved, and at his request he was to-day discharged from the hospital and went to his home in the country.

Original Lectures.

ON ABSCESS.

By ALFRED C. POST, M.D.,

PROFESSOR OF SURGERY IN UNIVERSITY MEDICAL COLLEGE.

GENTLEMEN—The subject of my lecture to-day is abscess. This term is used to denote a circumscribed collection of purulent matter in a cyst or sac, which is produced by inflammation. It occurs most frequently in parts which abound in cellular tissue. The inflamed part first becomes infiltrated with fibrine or liquor sanguinis, and then in the midst of its substance a small cavity is excavated by ulcerative absorption, and the cavity so formed is filled with pus. By progressive ulceration, the cavity becomes gradually enlarged, and the quantity of contained pus is increased in the same proportion. The ulceration involves chiefly the wall of the abscess which is nearest to the external surface of the body, or to some mucous canal which lies in its neighborhood; and in this manner the cavity of the abscess approaches nearer and nearer to the surface, until finally, when left to itself, it discharges its contents, when its opposite walls become approximated, and ultimately united with each other, chiefly by the process of granulation. Abscesses are often attended with marked embarrassment of the functions of important organs, and with serious disturbance of the general health. In many instances they endanger the life of the patient. The danger of abscesses depends upon a variety of circumstances.

I. Their size. A very large abscess is dangerous, on account of the large amount of irritation which attends its formation, of the exhaustion occasioned by the profuse discharge, and of the tax upon the vital powers resulting from the extensive destruction of tissues.

II. Their number. Very numerous small abscesses are attended with great irritation, and lead to exhaustion of the vital powers. This is illustrated by the irritation and exhaustion attending a severe attack of small-pox.

III. Their situation. When an abscess is situated in a vital organ, it greatly embarrasses the function of the organ in which it is located, and produces a corresponding amount of constitutional disturbance. When it is so situated as to interfere with the ingress or egress of the contents of a mucous canal, the degree of danger will be in proportion to the importance of the function which it impedes. If it encroach upon the respiratory tube, it will give rise to urgent and distressing dyspnœa, bringing the life of the patient into the most imminent peril. This source of danger is illustrated by retro-pharyngeal abscesses, by cynanche cellularis, and by purulent collections in the walls of the larynx or trachea. An abscess pressing upon the œsophagus may so interfere with the function of deglutition as to expose the patient to the danger of death by inanition. A fatal case of this kind occurred under my observation a number of years since. An obstinate obstruction of the œsophagus near its entrance into the stomach, rendered deglutition impossible, and a short time before the death of the patient, there was a copious discharge of pus, which was regurgitated from the œsophagus through the mouth.

An abscess compressing a portion of the intestinal canal may occasion fatal obstrucion of the bowels. And, in like manner, an abscess in the vicinity of the urethra may give rise to retention of urine, and if relief be not speedily afforded, a fatal event may follow. When an abscess is so situated that its progress towards the surface is greatly impeded by the extreme density of the

tissues which cover it, as where it occurs beneath a fibrous membrane, its progress is attended with great pain and constitutional disturbance. In such cases, the integrity of the organ involved in the disease is threatened, and even the life of the patient may be imperilled.

IV. The state of the general health. When an abscess occurs in a person whose general health was previously impaired by great privations, or by severe illness, or by vicious habits, the danger is greatly increased by the unfavorable condition so induced. Under such circumstances, the walls of the abscess sometimes present a gangrenous character.

V. The existence of a persistent source of irritation, counteracting the reparative efforts of the system. This source of embarrassment and of danger is represented by the presence of foreign bodies, of diseased bone, and of dead tissues.

VI. An impure state of the atmosphere in the place where the patient is treated, as in the wards of a crowded or ill-ventilated hospital, in the filthy habitations of the poor, etc.

Abscesses are divided into two classes, viz. acute and chronic. An acute abscess is one which passes rapidly through its several stages, the reparative process often being completed within three weeks from the commencement of the disease. Its formation is attended with active inflammation, with severe pains, and burning heat and throbbing, and with more or less febrile excitement. When the matter has been evacuated, the inflammatory symptoms rapidly subside, and the process of reparation is speedily completed.

A chronic abscess is lingering in its progress, and almost indefinite in its duration, continuing for months, or even for years. It is for the most part attended with little or no pain, the temperature of the part is scarcely elevated above the normal standard, and there is often no febrile disturbance. When fever exists, it is apt to present the hectic type. After the matter has been evacuated, there is often little or no tendency to reparative action, the cavity, in some cases, remaining undiminished in size, giving rise to a profuse and long-continued purulent discharge; and, in other cases, contracting to a sinus or fistula, which is strongly indisposed to heal. It often occurs, after the opening of a chronic abscess, that the matter contained in it undergoes a chemical change, by which it becomes acrid and irritating, contaminating the blood, and giving rise to irritative fever, by which the life of the patient is imperilled. Chronic abscesses are often attended with a diseased condition of the bones and articulations, or with the presence of foreign bodies, which keep up persistent irritation.

In the treatment of acute abscess, in its early stage, the aim of the practitioner should be to moderate the force of the existing inflammation. The means employed for this purpose will vary according to the constitutional condition of the patient, and the activity of the inflammatory disease. When the inflammation is active, with a firm resisting pulse, and well-marked inflammatory fever, and when the patient is young and has a vigorous constitution, general or local bloodletting, purging, antimonials, and other depressing agents may be resorted to. When the patient is old, feeble, or of broken-down constitution, a supporting treatment will be indicated.

During the forming stage of abscess, warm fomentations or emollient cataplasms may be applied with advantage. These applications relieve in some degree the sufferings of the patient, and they favor the approach of matter to the surface of the body. It is desirable, in general, during the progress of an acute abscess, that the patient should abstain from active exercise. In most cases, the horizontal posture should be maintained. When suppuration has occurred to such a degree that fluctuation is distinctly perceptible, an opening should be made for the evacuation of the matter. In many instances, the patient has an instinctive aversion to the use of cutting instruments, and strongly objects to the opening of the abscess. It becomes then an important question to decide whether the objections of the patient shall be positively overruled, and an artificial opening shall be made, or whether the opening of the abscess shall be left to the more tardy operation of nature. When the abscess is of moderate size, and involves only the skin and the subcutaneous cellular tissue, it may be safely left to itself. A spontaneous cure will ultimately take place, and the only bad consequence will be that the patient will suffer more pain than he would have done, if an artificial opening had been made. But there are many circumstances under which it is the imperative duty of the medical attendant to insist peremptorily on incising the wall of the abscess, and evacuating its contents at an early period. The early opening of an abscess should always be resorted to when the swelling embarrasses an important function, especially the function of a vital organ. When an abscess, for example, occupies the posterior wall of the pharynx, and encroaches upon the entrance of the larynx, so as to embarrass respiration, no time should be lost in making a free incision, and giving issue to the matter. The same remark applies to collections of purulent matter by the side of the larynx or trachea, or pressing upon the œsophagus. In that formidable disease, cynanche cellularis, in which the cellular tissue of the neck is inflamed, and suppuration is threatened, the patient should be watched with the utmost care, as it is uncertain at what point fluctuation may first be detected, within the buccal cavity, in the fauces, or beneath the base of the jaw, and an incision should be made at the earliest practicable period, to guard against the danger of suffocation.

When an abscess obstructs the urethra, the rectum, or any portion of the intestinal canal, it is important that an early opening should be made to evacuate the matter, and to relieve the obstruction.

Abscesses in the immediate vicinity of the thoracic or peritoneal cavities, or of the articulations, should always be promptly opened, as there is great danger of the extension of inflammation to the serous or synovial membranes, or of the bursting of the abscess into the adjacent cavities.

Abscesses encroaching upon the eye, the ear, or any other important and sensitive organ, should be opened at an early period, for the relief of the intense pain to which they give rise, and for the preservation of the important function whose integrity is jeoparded. An intra-orbital abscess is not only excessively painful, but it subjects the patient to imminent danger of loss of vision. The safety of the patient depends on the early evacuation of the contents of the abscess. In like manner, the small abscesses which occur in the walls of the meatus auditorius externus, near the bottom of the concha, give rise to the most agonizing pain, which can only be relieved by a free incision. This incision should be made very early, even before the pus is fully elaborated. It sometimes happens that two abscesses occur in the same ear, and that the deeper one is concealed from view by that which is more superficial. A few years ago, I was called one evening to see two patients in one house, a gentleman and a lady, who, by a curious coincidence, were both suffering from abscess of the external meatus. I made an incision into the abscess in the gentleman's ear, and he told me afterwards that he felt strongly inclined to knock me down, the pain

of the incision being of so excruciating a character. But in a few moments complete relief followed. I made a similar incision into the abscess in the lady's ear, and, to my surprise, little or no relief was afforded. I was obliged to make a free use of anodynes to diminish the intensity of the pain. I at once expressed the opinion that there was a deeper abscess which could not then be brought into view. This opinion was verified in the course of two or three days, when the swelling occasioned by the superficial abscess had subsided.

When an abscess occurs at a great depth from the surface, when it occurs beneath a muscle, or a fibrous membrane, or other dense and resisting tissues, it is very important not only that an early opening should be made, but that the incision should be sufficiently free to give a ready outlet to the matter, and fully to relieve the tension of the inflamed parts. It is not uncommon to meet with deep collections of purulent matter, in front of the tragus, over the temporo-maxillary articulation, or behind the concha in the mastoid region, constituting what have been termed pre-auricular or post-auricular abscesses. These purulent collections are attended with agonizing pain, and with great constitutional disturbance, and they not only threaten the integrity of the organ of hearing, but they bring the life of the patient into jeopardy. A free and deep incision is the sheet-anchor of safety to the patient.

When an abscess involves a secreting gland, as the mammary, parotid, etc., the early evacuation of the matter is important, as the most efficient means, not only of relieving pain and constitutional irritation, but of preventing extensive disorganization of the glandular substance.

In all cases in which the progress of an abscess gives rise to severe pain, or to great constitutional disturbance, an incision for the evacuation of the matter constitutes the most prompt and available means of relief.

When an abscess presents a gangrenous character, being attended with rapid disintegration of tissues, and emitting an offensive odor, a free incision is important to the safety of the patient. If it be omitted, there is reason to apprehend extensive destruction of the adjacent tissues, and contamination of the blood by the noxious fluids contained within the abscess.

The manner of opening an acute abscess varies somewhat according to its situation, its depth, and the density of the investing tissues. Under ordinary circumstances, when the walls of an abscess are of moderate thickness and density, the most convenient method is to insert the point of a sharp bistoury into the cavity of the abscess, and to bring it out through the skin at the distance of half an inch, an inch, or more, from the point of entrance, and to complete the incision by carrying the knife onward in the same direction. The point selected for opening the abscess should be where fluctuation is most distinct, or at a point where, in the ordinary position of the patient, the matter will be most readily drained off. In the case of a large abscess, it will be often necessary to make one or more counter-openings at convenient points, to secure a more effectual drainage of the matter. These counter-openings may be made after the lapse of variable intervals of time, as the necessity for them may become manifest. The best point for making the counter-opening may be determined by introducing a long probe through the original opening, until it approaches the surface at a depending part of the abscess. After the opening has been made, it will often be advisable to insert a tent of lint, which may be left in place for several days, until the opening has become established. When an abscess is quite deep, and when its walls are of considerable density, it may be difficult to transfix the cavity so as to bring out the point of the knife. In such cases, after the bistoury has entered the cavity, the opening may be enlarged by raising the heel of the instrument, and ripping up the integument. When the opening is made in this manner, it is more painful than by the former method. When an abscess is confined by a very dense fibrous membrane, it may be opened by making a free incision with a scalpel directly upon its face. In certain obscure abscesses in the posterior wall of the abdomen, it will be advisable to make a cautious dissection, layer by layer, down to a point where fluctuation can be detected, in the manner recommended by Prof. Willard Parker.

When a deep-seated abscess is covered by an expansion of muscular fibres, the incision by which the abscess is opened should cross the direction of the fibres of the muscle; otherwise the purulent matter will not escape. If the opening be of insufficient size, and there be any good reason why it should not be enlarged, the escape of matter may be facilitated by the introduction of a canula. After the opening of an acute abscess, it is not generally advisable to make pressure to accelerate the flow of the matter. If the opening be sufficiently free, the matter will escape as rapidly as the walls of the cavity will accommodate themselves to the diminished quantity of its contents. Pressure will occasion unnecessary pain, and when the pressure is removed, the walls of the cavity will expand, and air will be forced in by atmospheric pressure: the air so introduced will act chemically on the matter as it is secreted, causing it to assume an acrid and irritating character.

For two or three days after the opening of an acute abscess, emollient poultices may generally be applied with advantage. But the long continuance of such applications has a tendency to increase and to prolong the suppuration, and to retard the healing process. As soon as the inflammation has lost its active character, a pledget of lint spread with cerate or basilicon ointment may be laid over the opening; over this may be placed a linen or muslin compress, to be kept in place by a roller bandage applied with a moderate degree of firmness. The dressings should be renewed once or twice a day, according to the quantity of the discharge. When there is copious suppuration, the strength of the patient should be maintained by generous diet, and, if necessary, by tonics and stimulants.

The treatment of chronic abscesses differs, in many respects, from that of acute abscesses. The constitutional treatment is mainly directed to invigorate the general health, to promote healthy secretions, and to restore to their normal condition any functions which may be disordered. When the local inflammation attending the formation of the abscess is somewhat active in its character, moderate local depletion will often be of service. Revulsion by the skin, or by the alimentary canal, will also, in many cases, exert a beneficial influence. Small chronic abscesses about the neck or face of a young female should be carefully treated with reference to the avoidance of an unseemly cicatrix. The incision should be small, and should correspond in direction with the natural folds of the skin. Gentle pressure should be made to force out the contents of the cavity. This is especially necessary in scrofulous abscesses, in which the matter contained is like a mixture of curds and whey. After the abscess has been evacuated, a compress of lint should be laid over it, and should be kept in place by strips of adhesive plaster.

Large chronic abscesses, like those which so frequently originate in the region of the psoas muscle, require to be treated with great caution, as they ex-

pose the life of the patient to imminent danger. The question has often been discussed, and it has given rise to no little anxiety in the minds of surgeons, whether these abscesses should be evacuated by art, or whether the opening should be left to nature. When the opening has occurred, whether it has taken place spontaneously, or has been the result of artificial interference, there is often a decided aggravation of the constitutional symptoms. Irritative fever, with anorexia and nausea, and great prostration of the vital powers, are very apt to ensue. The liability to the occurrence of these symptoms has produced in the minds of many surgeons a reluctance to make an artificial opening. I am myself inclined to the opinion, that in most of these cases it is best for the patient that the surgeon should make a puncture or incision for the evacuation of the matter. It should not in ordinary cases be made until the matter has approached sufficiently near to the surface to produce distinct fluctuation. It may then be expedient, when the abscess is very large, and the vital powers have begun to flag, to make a small puncture, and to allow half or two-thirds of the contents of the abscess to escape without external pressure; and then to cover the wound with adhesive plaster, and apply a compress and bandage. After a week or two, another puncture may be made, and the rest of the matter evacuated, after which a compress and bandage may be applied as before. When the abscess is of moderate size, and when the general health of the patient has not been much impaired, a more free opening may be made at once, and the whole contents of the abscess evacuated. In either case, if the pus assume an offensive and acrid character, and there be symptoms of irritative fever, a very free incision should be made, and the cavity of the abscess should be thoroughly cleansed, by injecting it with Castile soap and water by means of Davidson's syringe or some other suitable instrument. This injection should be repeated once a day, or oftener if necessary. A compress and bandage should then be applied to keep the walls of the abscess as nearly as possible in contact. The strength of the patient should be maintained by appropriate diet, with the judicious use of tonics and stimulants. When the cavity of the abscess has contracted to the dimensions of a sinus, stimulating injections may be often used with advantage. For this purpose, the surgeon may use the liquor sodæ chlorinatæ, diluted with eight parts of water, or sulphate of copper, three to five grains to the ounce, or sulphate of zinc of the same strength. These injections may be repeated daily, or at intervals of two or three days. When chronic abscesses have remained very long unhealed, it will be well to examine if there be dead bone, or some foreign body keeping up the irritation. The removal of such foreign material will often be followed by the speedy closure of the abscess. When there is no such cause of irritation, the application of a large blister over the surface will sometimes lead to a very favorable change. I have recently used this remedy in an exceedingly obstinate case, with most signal advantage.

LUNATIC ASYLUM FOR CONNECTICUT.—The new lunatic asylum for the State of Connecticut now established at Middletown, has been donated 230 acres by the State and city authorities for the purpose.

THEODORE RUETE, Professor of Ophthalmology in Leipsic, died in that city from apoplexy on the 23d of June. He was 57 years old; had held his position in the Leipsic University for five years. He was the well-known author of a text-book on ophthalmology.

Progress of Medical Science.

NEW METHOD OF TREATING YELLOW FEVER.—Dr. Alexander Fiddes, F.R.C.S.E., of Jamaica, W. I., professes to have saved more than the usual number of patients afflicted with yellow fever, by the following method of treatment: He administers at the beginning of the disease a full dose of castor-oil, carefully discarding calomel and quinine, as not only useless but injurious; this he follows up with the alkaline sulphites, giving the preference to the bisulphite of soda as being tasteless, and not likely to offend the stomach. The dose of this agent as employed by Dr. Fiddes, is twenty grains every two or three hours in a glass of water. As adjuvants, he uses iced sheets to envelop the body when the skin is hot and dry, or an occasional vapor-bath when the surface is dry merely without being hot.

SULPHITE OF SODA IN THE TREATMENT OF ERYSIPELAS.—Dr. Addinell Hewson says he has obtained results from the use of sulphite of soda in the local treatment of erysipelas, which have been to him both interesting and surprising. In extensive trial of the remedy, both in hospital and private practice, he has never seen it fail, when thoroughly applied before the deep planes of cellular tissue had been invaded by the disease. Before such parts had become affected, a solution of ten grains of this salt to the ounce of water, when thoroughly applied on lint all over the surface affected, and to a considerable distance beyond it, and covered with oiled silk to prevent the evaporation of the solution, had not only produced a decided bleaching effect on the discolored surface in every such instance, in the first twenty-four hours of its use, but had invariably destroyed all traces of the disease in forty-eight hours from its first application. The effect was the same, whether the application was made in the traumatic or idiopathic form of the disease. He has thus cured twenty-seven cases, seven of which were of idiopathic erysipelas. Even in the cases where the deep planes of cellular tissue were involved, as well as the surface, the disease on the surface was always apparently affected by the application. It was most positively bleached in all instances, and in many was evidently destroyed, within the period above stated, even while that in the deeper part proceeded to suppuration.—*Trans. Col. Phys., Philadelphia.*

MENORRHAGIA AND MENORRHAGIC PAIN TREATED SUCCESSFULLY BY THE SPINAL APPLICATION OF HOT WATER.—Dr. John Chapman, in the *Medical Mirror*, speaks of the local application of hot water in relieving the distress of menorrhagia. He reports a case in which water, heated to 120° F., was applied along the lower third of the spine, and kept there until the water became cooled. The result of the first application was a wonderfully rapid and great relief to the patient's back, and the flow was to a great extent restrained. The flow had quite ceased, after seven applications of the water, at the end of the fifth day, and had been so lessened in quantity, that but little more blood was lost during the four days after the treatment began than was lost during the previous eighteen hours. Moreover, the patient found herself very much better and stronger than during her previous periods. Dr. Chapman highly recommends this treatment.

PREVENTION OF PURULENT ABSORPTION BY ERGOTINE.—It appears, from the observations of M. Labat, a physician of Bordeaux, that the administration of ergotine after amputation is attended with the most beneficial results. The ergotine is given after the amputation,

and each day up to the day when the ligatures come away, the medium dose being from five to six grains. M. Labat's memoir on the subject, presented to the Societé de Chirurgie, records fourteen cases treated in this way.—*Medical Times and Gazette.*

Amblyopia Produced by Tobacco-Smoking.—M. Viordin has reported three cases of ambiyopia caused by smoking. In the treatment of these cases the quantity of tobacco smoked wes reduced, under the direction of M. Viordin, and the sight was restored in the course of a few weeks.—*Medical Times and Gazette.*

Chorea Treated by Richardson's Apparatus.—An interesting case in which chorea was successfully treated by freezing the skin over the spinal cord has lately been recorded in the *Gazette Hebdomadaire*, and tends to some extent to support the ice theory of Dr. Chapman. A little girl, about seven years old, was attacked with chorea, and presented herself to Dr. Lubelski, who, having tried in vain the usual tonic and antispasmodic remedies, determined to produce anæsthesia of the spinal cord, by means of ether spray. The instrument used was the variety of Richardson's apparatus used by dentists, and which has a double nozzle. It was applied to both sides of the spinal cord, and the ether spray was forced upon the surface for three or four minutes, the operation being twice repeated. The result was that all the abnormal movements ceased, and the natural powers of motion were restored.—*Lancet.*

Common Salt for Wounds.—A French writer speaks in terms of the highest commendation of chloride of sodium in the treatment of wounds and ulcers. The first effect on a fœtid wound he says is to destroy the odor immediately. Another immediate phenomenon observed is the pinkish hue which it gives the decomposed sanguineous, blackish liquids in the wound. At the same time there is felt a peculiar sensation of cold and prickling, which may even become slightly painful. The suppuration diminishes rapidly, and in the changes in it has a happy effect on the system, the appetite improving and the strength returning. Four hundred cases of wounds thus treated are reported. There was neither erysipelas, nor tetanus, nor hospital gangrene in any one, though the hygienic condition of the hospital was bad. In only one case was there pyæmia. The solution first applied was in the strength of one drachm to a pint of water. After using this a few days, a concentrated solution was employed. In fistulous cases the solution was injected into the sinuses.—*Pacific Medical and Surgical Journal.*

Pompeii.—One of the latest discoveries reported from the excavations, is that of a bronze vase hermetically sealed, and containing a considerable quantity of water, which was pronounced clear, fresh, and remarkably soft after its repose of 1800 years.—*Richmond Med. Journal.*

Lime Inhalations in Pseudo-Membranous Croup.—Dr. B. B. Wilson, in the *Medical and Surgical Reporter*, speaks very highly of lime inhalations, and gives some instances in which the curative effect of the remedy was most marked and decided. Owing to the difficulty in inducing children to use the inhaler, he "frequently extemporizes a vapor-bath, by throwing a large blanket over the child's head and shoulders, as well as over the sofa upon which it reclined, and including also within its circumference a pitcher, in which a small lump of quicklime was being rapidly slaked by means of boiling water. In this way the air surrounding the child's body, as well as that respired, was highly charged with the vapor of lime-water. This process was repeated every hour, or every half hour, when the breathing seemed more than usually hurried and difficult. The immediate effect upon the patient seemed to be soothing, the most urgent dyspnœa being relieved, and the little sufferer almost always becoming quieter and falling into a light sleep under its use."

Nasal Hæmorrhage.—Dr. Heard, in the *Gazette des Hôpitaux*, says he never fails to stop the most obstinate epistaxis by a simple process of compression of the nostrils. Being subject in early life to epistaxis, he found the hæmorrhage come from a part of the septum within reach of the ends of the fingers. By compressing the alæ upon the septum, the bleeding generally ceased within five minutes. Even the hæmorrhages of typhoid fever, or those occurring with organic disease of the heart, have been usually checked without losing a teaspoonful of blood.—*Boston Med. and Surgical Journal.*

Causes of Deaf-Dumbness.—Dr. Peet, Principal of the New York Institution for the Instruction of the Deaf and Dumb, has recently published statistics from which he deduces the striking conclusion that in Europe, generally, the chances of the birth of a deaf-mute child are more than twice as great as in the United States, or 615 in a million there, against 278 in a million here; while the chances of the loss of hearing after birth are in Europe, except in Germany, much less than in the United States, to wit, 154 in a million there, and 222 in a million here. Such statistical results as these form the data from which we must study the cause of deaf-dumbness. The striking contrast between the Old World and the New may be owing, in part, to climate; in part to the severe out-door labors imposed on women of the laboring classes in many countries of Europe; in part to idiosyncrasies of race. The European returns which show such a preponderance of congenital cases, are chiefly from countries where the bulk of the population is of the Celtic and Latin races. We have very few such returns from European populations of the Anglo-Saxon and Teutonic races, and most of those we have agree with the American returns in presenting a large proportion of accidental cases. The causes of congenital deafness are as yet but very imperfectly understood. When deafness is the apparent result of a known disease, or accident, it is comparatively easy to judge with probability of the mode of operation; but in most cases of congenital deafness we are left wholly in the dark, even as to the condition of the organs of hearing. They are too deeply seated for more than a very superficial examination in life, and opportunities for dissection of subjects known to have been deaf-mutes rarely occur.

The remote causes that have been, with most probability, assigned for congenital deaf-dumbness are the following:

1. Unequal ages of the parents, especially where the mother is older than the father, or advanced age of either parent, especially of the mother.
2. Ill health and feebleness of constitution in one or both parents, especially where there is a hereditary tendency to scrofula.
3. Impairment of the procreative power, especially in the father, through early dissipation or bad habits.
4. Intermarriages of blood relations.
5. Causes operating during gestation, through the excited imagination or nervous sensibility of the mother.
6. Ill health of the mother during gestation, or physical accident during that period.
7. Intemperance in one or both parents about the time of conception.
8. The influence of unhealthy occupations, bad wa-

ter, inferior diet, or damp dwellings of the parents, on their offspring.

9. Direct hereditary transmission.

All these primary causes, it will be seen are, *mutatis mutandis*, as applicable to other congenital infirmities as to deaf-dumbness. A defective bridge gives way at its weakest point; and where there is no specially weak point, the point of fracture may be determined by slight causes. So it seems there are families in which the weak point of the constitution is the apparatus of hearing; but in many cases the tendency to deafness, rather than to idiocy, blindness, lameness, or some other infirmity, was biassed by causes that often baffle research, because they seem so slight that they elude attention.

Phthisis in Barbadoes.—Phthisis is a disease that has been supposed hardly to exist in the tropics, but observations of late years seem to say that such is far from being the case. In the island of Barbadoes it is much more common than formerly, and quite so amongst the negroes. Since the abolition of slavery, the diet of the blacks has probably been less nutritious than when they were not obliged to provide for themselves, consisting now chiefly of Indian-meal, sweet potatoes, and flying-fish—which last delicious fish is taken in immense numbers around the island; and to this cause the increase of disease seems to be attributed, though the general appearance of the blacks struck me as quite healthy. And I would remark that the number of mulattoes, in whom we generally find a greater tendency to tubercular affections than in the pure negroes, appeared to me to be small. I saw several cases of phthisis at the hospital, and was told that when patients come to the island with this disease no marked benefit is experienced, though the climate, if a tropical one could have any effect, seems to be all that could be desired. Scrofulous glands and disease of the joints are also common, but tubercular meningitis is very rare.—Dr. J. B. S. Jackson, *Boston Med. and Surg. Jour.*

Burns or Scalds.—The following is one of the best applications we know of in cases of burns or scalds, more especially where a large surface is denuded of the cuticle:—Take a drachm of finely powdered alum, and mix thoroughly with the white of two eggs and one teacupful of fresh lard; spread on a cloth, and apply to the parts burned. It gives almost instant relief from pain, and, by excluding the air, prevents excessive inflammatory action. The application should be changed at least once a day.—*St. Louis Med. Reporter.*

Monthly Period of Infecundity.—Dr. Avrard, a physician of Rochelle, has published a work entitled "Generation and the Duration of Pregnancy in the Human Race," in which he has arrived at the following conclusions:—1. The cycle of generative functions lasts 28 days. It is divided into three periods of unequal length, which the author calls *menorrhagic*, *generative*, and *hypnotic*. 2. Menstruation returns normally every 28 days, starting from the accession of the courses. Its duration is indefinite. 3. A certain time elapses, most frequently, and perhaps always, between the end of the courses and the beginning of the generative period; this time the author calls the *interperiodic phase*. 4. The generative period always ends the 14th day after the beginning of the courses. 5. It has been shown by an observation of fifteen years, and resting to-day upon thousands of facts, with proof and counter-proof, that woman is physiologically barren during fourteen days in twenty-eight—that is to say, after the fourteenth day, commencing with the appearance of the courses, till the end of the following period. M. Avrard does not admit the possibility of impregnation during the period of the menses, and maintains that parturition is effected always two hundred and seventy days after impregnation.—*Jour. de Méd. et de Chir. New Orleans Med. and Surg. Journal.*

A Case of Dislocation of Femur.—Dr. G. W. Topping, of Dewitt, sends to the *Review* the account of a case of "probable dislocation of the head of the femur into the great sciatic notch, and reduction by manipulation before the diagnosis had been satisfactorily established." A boy had fallen from a sleigh, had been caught by the right foot, and dragged for a considerable distance on the ground. A superficial examination revealed symptoms of dislocation of right femur, upward and backward. He was unable to stand upon his right foot, or move it outward or forward. Standing upon the left foot, the right great toe rested on the left os calcis. The right heel was lifted slightly from the floor, and the corresponding thigh closely hugged its neighbor. The boy referred the pain to a point below the knee, and the doctor flexed the thigh upon the body at a right angle. Taking hold of the knee with one hand, and the ankle with the other, he then rotated the limb outward. The patient complained but little during this process, and no sudden snap indicated the reduction of the dislocation; but all symptoms of injury, except a slight stiffness of the muscles, suddenly vanished, and the boy, who a moment before was not able to bear his weight on the limb, could now walk without difficulty. Dr. Topping considers the lesion to have been a dislocation of the head of the femur into the great sciatic notch.—*Detroit Rev. of Med. and Pharmacy.*

Case of Bromine Poisoning.—Samuel P. Duffield, Ph. D., in the *Detroit Review of Medicine and Pharmacy*, gives the following successful treatment of poisoning by bromine inhalation. The corrosive action of the bromine was such that the glottis had closed with a spasm, and did not yield willingly. The patient was brought near to a steam-pipe, the mouth held open, and the steam thrown from some distance, so as not to burn him, into his mouth and over the face. It had the desired effect, and the patient was subsequently sent home. The steam inhalations were continued for some time, and the patient recovered. The attention of the profession is particularly called to the great value of steam inhalations in cases of poisoning by corrosive vapors.

Occlusion of the Os Uteri.—Mr. Mellor read notes before the Manchester Medical Society, of a case of occlusion of the os uteri during labor. The patient, aged 21, was a primipara, and was at her full time. On his arrival, there were no urgent symptoms, and he left again shortly. He was soon sent for hurriedly. Severe expulsive pains had been going on for some time. The external organs were in a state of relaxation, and delivery seemed at hand. But, on examination, not a trace of the cervix nor of the os could be detected. The posterior wall of the vagina and the cervix were quite continuous with each other; as if agglutinated together. A careful examination was then made with a speculum, but nothing like the os could be seen. Mr. Robertson also saw the case; and it was determined to make an opening into the uterus. This was done in the presumable site of the os with a scalpel; and, after a while, as no dilatation took place, a curved bistoury was inserted, and the incision was prolonged anteriorly and posteriorly. A great quantity of meconium escaped. The occiput speedily came through, and all went on well. The labor lasted six hours, and the recovery was uninterrupted. There had previously not been a

trace of uterine affection, and menstruation was always healthily performed. Dr. Thorburn made some remarks on such cases, and quoted Mattei, who had reported forty-two cases, not all primiparæ, and who considered that, in the majority, the occlusion was owing to simple organization of the cervical plug of lymph, and not to inflammation.—*British Med. Jour.*

Death from Swallowing two Ounces of Chloroform.—Dr. D W. Stormont, of Topeka, Kansas, reports (*Leavenworth Medical Herald*) a case of suicide by the internal administration of chloroform. The patient was twenty-six years of age and in good health at the time. He swallowed two ounces of undiluted chloroform at a single draught. In three minutes after he had laid himself composedly down, he could with difficulty be aroused from the stupor into which he was rapidly sinking; and though he could not speak, he indicated that he had severe pain in the region of the stomach. In five minutes he was entirely unconscious and breathing stertorously. He died in just one hour after taking the draught. Medical assistance from some cause did not arrive until a few minutes before he died, and nothing was done to counteract the effects of the poison. At the post-mortem examination, the surface generally was livid; the face, neck, chest, and nails very much so. Bloody froth was issuing from the mouth and nostrils. On opening the chest, both lungs were found to be dark externally, and fully distended. They were uniformly congested with dark, liquid blood, and the posterior portions were perfectly engorged with it. Both sides of the heart were nearly full of black, uncoagulated blood; the liver and spleen both normal externally, but somewhat softened, and filled with dark, liquid blood. The œsophagus was congested. The stomach, at the cardiac end, and along the greater curvature, and half way up each side, was discolored externally, dotted over with ecchymosed-looking patches, giving it a mottled appearance. It contained two or three ounces of a light-colored liquid, which had a slight odor of chloroform. At the cardiac end, internally, and along the bottom nearly to the pyloric end, the mucous membrane was of a dark-red color, softened, and easily peeled off with the thumb-nail. Up the sides it was of a brighter red, speckled appearance, and not softened. The intestines were healthy. Circumstances prevented the extension of the examination, which is much to be regretted. The reporter of the case closes with the following remarks:—"Recoveries are recorded from drinking two ounces, or even more, of chloroform, but active measures were used—as the stomach-pump, emetics, stimulants, internal and external artificial respiration, galvanism, etc. As an internal stimulant, the spirits of ammonia, or the carbonate of ammonia, is the best. Very dangerous symptoms have been produced by half an ounce, and death has been caused by one ounce. Dr. Stillé says: 'When death has been produced by the internal use of chloroform, its local irritant action has evidently been the chief cause of the fatal result.' In this case, death followed too soon to have been produced in this way. It was more probably caused by the action of the poison on the blood and the cerebro-spinal system, as in prolonged inhalation of the vapor. A peculiarity of this case is the shortness of the time between taking the chloroform and death, as compared with other fatal cases reported."

Sloughing produced by Local Anæsthesia.—We examined, a few days since, in the Middlesex Hospital, a young woman whose case is of no little importance in reference to the question of local as against general anæsthesia for operations. Mr. Lawson had diagnosed the existence of an abscess behind the patient's breast, and as the pus was very deep (under the pectoral muscle), the refrigerator was used, paraffine ether being employed. Congelation was rapidly produced, and kept up for a few minutes. The result has been, that a portion of skin, about an inch by three-quarters of an inch, over the upper part of the breast, had sloughed, and its healing will necessarily be attended by an unseemly scar. The patient is a maid-servant; were she unfortunately a lady, the undress of the modern ball-room would be impracticable without revealing such a blemish as might seriously damage her value in the matrimonial market. The case is certainly exceptional; but the circumstance is worth remembering when exposed parts of the body are to be operated upon.—*Lancet.*

New Mode of Treating Fracture of Lower Jaw.—Dr. Benj. H. Riggs, of Selma, Ala., reports in the *Southern Journal of Medical Sciences* for May, 1867, a case of compound fracture of the inferior maxilla, occurring in an adult, in the treatment of which he claims that he made use of a new method. The point of fracture was "immediately to the right of the symphysis, and through the socket of the right central incisor, the outer half of that tooth being exposed to view; the right fragment was very much drawn inwards; the gum was freely severed at the seat of fracture." A pasteboard splint and Barton's bandage was first applied, and the patient put upon his good behavior. This method proved unsuccessful, for the patient took the liberty of neglecting the doctor's instructions as to rest and method of eating, so that at the end of six weeks there was found a fistula under the chin, but no evidence of an attempt at union of the bones. Dr. Riggs then determined to use some mechanical appliance within the mouth, and obtained the assistance of Dr. S. G. Todd, a dentist, who took an impression in soft wax, formed from it a plaster cast, and upon this constructed a silver band, which was "made to fit every inequality of the teeth, completely encircling the first nine; it was not quite as wide as the teeth were long, and did not interfere with the closure of the mouth. An intercommunicating portion extended from the front arm of the band to the posterior, at the seat of fracture." This appliance was found to maintain exact coaptation of the bones. A tin fracture-box, which was soon discarded as cumbersome and unnecessary, and a two-tailed bandage, completed the apparatus. Under this treatment the fistula closed at once, and the case seemed to progress favorably for some weeks; but at the end of that time it was found necessary to remove the right central incisor, which, being at the seat of fracture, had acted as a foreign body. It was then seen that there had been no attempt at bone formation. The band was now shortened and readjusted, after which the fistula again closed, and the case progressed favorably to the end of the treatment. At the end of six weeks from the extraction of the tooth the apparatus was removed, and the patient discharged, although on account of the anæmic condition of his system, osseous union was not yet perfect.

Curare in Epilepsy.—Dr. Benedikt informs the Vienna Medical Society that the subcutaneous injection of curare has a favorable influence over epileptic diseases. A man, 20 years of age, had had epilepsy since he was 9 years old. During five months he was subjected to curare injections in hospital. For the last fifteen months he has had no return of the fits. Four similar cases, equally successful, were related by Dr. Benedikt. The injections were used three times a week, under the skin in the neck, an eighth of a grain being used at each operation.—*British Medical Journal.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, September 16, 1867.

HOSPITAL EXPERIENCE.

THE facilities for study, experiment, and observation, afforded in connection with extensive hospital practice, are fully appreciated by medical men; as evinced not only by the laborious exertions necessarily made to obtain appointments upon the medical staffs of public institutions, but also, and perhaps in greater degree, by the tenacity with which positions are retained by the successful candidates. Too few of those who enjoy hospital privileges think of availing themselves of their superior advantages for a few years merely, and then gracefully retiring to welcome a successor. Professional pride, or professional capital, whether it take the form of fame as a teacher, or fame as a practitioner, creates a desire to make, for the time being, the most out of an appointment, and then induces a habit to hold on to it as long as possible—until infirmity suggests the policy of withdrawal, or the charms of a preferable position woo its reluctant worshipper to the embrace of a heavier responsibility.

Inseparable from the charge of a large number of sick, are duties and personal sacrifices which are arduous and onerous; the services requisite for the fulfilment of which are recompensed by no pecuniary equivalent; nevertheless, well as this is understood, new aspirants for duties and responsibilities press forward their claims to gratuitous employment, whenever there is wafted from the medical staff of a hospital the slightest suspicion of the shadow of a vacancy.

Some desire the position to be enabled to study; others require it to be enabled to teach; a few think it necessary to the establishment of their reputation or standing.

The advantages of a position in a hospital are very great.

Practical experience is necessary to success in the treatment of disease. The most brilliant theories of cure must withstand the test of bedside criticism before they can be relied upon, and this has been the case from the earliest dates of the professional record, whatever the disease, whatever the therapy; results differ from expectations so often and so constantly, that the action of new remedies cannot be depended upon, until confirmed again and again by repeated observation.

The practice of medicine, as ordinarily pursued by the family practitioner, does not often afford opportunities ample enough or precise enough for the prompt determination of the value of asserted discoveries in therapeutics; the physician who is constantly employed in the exercise of his profession, seldom has time for the systematic prosecution of his investigations, and if he has plenty of time for methodical observation, his opportunities for availing himself of it are apt to be less frequent. Then again, in private practice it is extremely difficult to control patient, nurse, attendants, medicine, diet, social intercourse, and so on, sufficiently to judge correctly of the individual influence of special modifications of treatment unaffected by interference from extraneous circumstances. Implicit compliance with all the instructions of the physician is rarely encountered in private practice; the medicine ordered for the patient may be administered with scrupulous exactitude by the conscientious nurse, but indiscretions of diet, of social intercourse, etc., are often indulged in without telling the doctor, especially in cases where danger to life has not excited the fears of the patient and his friends, to the detriment of any investigation in therapeutics by the physician. Effects are thus encountered, which may or may not be the result of the ascribed cause, and therefore, in order to estimate discerningly the value of each disturbing element, investigation is necessarily prolonged, suspended, and again renewed as opportunities offer, until sufficient evidence is collected to justify the adoption of ultimate conclusions. Thus, in important cases, experience at the bedside in private practice is accumulated slowly and with great labor.

In a well-regulated hospital—and every hospital should be well regulated—the surroundings are different; discipline is essential to the preservation of order, and patient and nurse, apothecary and cook, medicine and drink, are under the control of the physician; such food and medicine as he prescribes, and such only, is administered to the patients; no officious interference by nurse or relative is permitted or dreaded; the temperature of the ward, the degree and character of ventilation, the access of visitors to the bedside—all this is regulated in accordance with the instructions of the physician; intelligent professional assistants watch the course of the disease, note important changes and results in the absence of the principal attendant, examine the secretions and excretions, and bring into requisition all the appliances of differential diagnosis, at hand at the moment needed; observations are made at stated intervals, and recorded for the examination of the principal; fact is accumulated after fact, until, eventually at the close of the case, a distinct and complete record has been made of all important features, with due allowance for every disturbing element in its management. The simultaneous presence of a number

of similar cases, as often occurs in the wards of a large establishment, offer facilities for bedside comparison which cannot be made where patients reside apart, and which are invaluable in the study of the progress of disease and its cure. And at the fatal termination of an obscure or severe case, the opportunity for post-mortem examination under the most favorable circumstances, as to time of day, and conveniences of a special apartment for that purpose, are of the utmost utility; careful drawings can be made of morbid appearances, for future study and reference, specimens preserved for minute examination and comparison, etc., etc.

Thus in hospital practice tolerably reliable results can almost always be secured as to the history of disease or the effect of treatment. Observation alone, however, is but of limited benefit; the advantage is confined to the observer and those with whom he is in immediate professional intercourse, and to the observer himself it is of but limited advantage unless the observations made are recorded at the time of occurrence. Facts are to be accumulated at the bedside; they are to be considered, pondered on, collated, and compared with facts previously accumulated in the study. The conclusions of one who adopts this plan will be far different from what he would arrive at from dependence upon memory alone, for it has been acknowledged by writers that the impressions made upon the mind by recollections of experience do not always confirm the recorded results of statistics.

Hence the importance, in hospital practice, of carefully recording experience which is new, or which will bear upon doubtful or disputed points in medicine; but such records should not remain buried in the case-book of the hospital, or the professional note-book of the physician; they should be announced for the benefit of those who have not access to the wards of a hospital, and who in great measure depend upon hospital men to verify assertions and determine mooted points in therapeutics. The members of a hospital medical staff are looked upon, by the rank and file of the profession, as leaders in the investigation of disease, therapy, and pathology, and it is a duty they owe to their less prominent brethren to tell them what they have learned, or what they have discovered in their hospital experience.

Abroad, it has been customary for the staff of a hospital to publish its hospital reports periodically, comprised of papers on special subjects of interest, carefully prepared, incorporating the results of their observation and experience, with the collated record of the sentiments and conclusions of others in this country. The coming year will inaugurate a similar system in two of our most prominent hospitals—Bellevue Hospital, of New York, and Pennsylvania Hospital, of Philadelphia, establishments which present as good material in character of cases, and acquirements of attendants, for valuable papers as any similar establishments elsewhere. In calling attention to this important and praiseworthy movement, we would urge the adoption of a similar plan upon every hospital staff in the country. To such we would say, publish whatever occurs of interest or instruction in the institutions under your charge, whether it form a thin pamphlet or a bulky volume; if you cannot find a publisher with sufficient enterprise to print it, ask the institution receiving the benefit of your gratuitous services, to acknowledge their obligation to the profession by the periodical appropriation of a sum sufficient to cover the expense of publication. We need in this country more new works, practical, suited to the climate, the people, and the style of practice. Clinical reports of hospitals are always welcomed; they present in succinct form the views and results of the day; they are passing events, and are always welcomed, and therefore they form a prominent portion of the contents of our medical journals. Summaries of sets of cases treated alike, or treated differently, collected with care, will doubtless prove equally acceptable in the form of yearly Hospital Reports, and we anticipate that the annuals of Bellevue and of Pennsylvania Hospital, will meet with a cordial reception from the profession at large, not the less agreeable because it will be a new form of medical literature.

Inestimable, however, as are the advantages of hospital experience, and much as we should value their published record, we must be careful not to over-estimate their value. Apart from the humaneness of attending upon those sick compelled in their extremity to accept the kind offices of strangers, the main object of hospital practice is to furnish general practitioners with a reliable source of estimate of the value of various therapeutic agencies offered for their adoption, that they may make use of the results in the ordinary practice of their profession. We are too apt to take these results and apply them just as they are. This is an error. In studying and comparing hospital reports, we must not forget that they are results obtained under hospital *régime*, and that they will become modified when we put them to practice. We must remember that disease is resisted with more routine in the ward of a hospital, than in the private chamber of the sick; and that there exists, too, a modifying influence in the social position and relations of the invalid at his own house, and the patient in a public institution; and in institutions altogether eleemosynary, there is a still greater difference in this respect. These, and similar considerations, modify the condition of the patient essentially, and thus both directly and indirectly influence the course of the disease and the result of therapeutic interference. Under certain circumstances, therefore, we shall anticipate the success in the treatment of certain diseases to be greater in the hospital than it will be in the private residence; and under other circumstances, the reverse will be the case. A striking example, for instance, of the great difference in the result of treatment of the same disease as it is encountered in the

hospital, and as met with in private practice, is afforded us in typhus fever. The same physician will be successful with his typhus patients in hospital at the same time that he is losing them in his private practice; and the latter class of patients will too, as a usual thing, belong to a better class of society, and yet the success of treatment will predominate with the poorer class. Why are the results not constant, even under the most favorable circumstances of worldly resources? Because in the one case we can do much to improve the hygienic condition of the patients, in providing better diet, better clothing, better air, and the system responds to the assistance; on the other hand, the private patient occupies well-ventilated apartments, lives in a healthy locality, possesses ample change of linen and bedding; is supplied with the most desirable articles of diet, and yet the means are inefficient here, which have sufficed in the hospital, because we cannot improve his hygienic condition; or, if the private patient be not of the better class, and lives in confined localities, with restricted diet, limited change of clothing, we cannot improve his hygienic condition to the same extent as if he were in hospital, and hence the success of remedial agents will, in each instance, be less certain. The same process of reasoning can be carried out in other diseases, and especially in the treatment of surgical diseases, to show that in guiding ourselves by the results of study, experiment, and observation, as recorded in hospital reports, it is necessary to exercise a certain amount of discretion in applying to private practice these results of hospital experience.

We have doleful accounts of the prevalence of the yellow fever upon our Gulf coast. In Galveston, Texas, where, according to the views of the physicians there, the disease was not introduced but germinated, the type has been particularly malignant. A despatch from this city, received by the U. S. Secretary of the Treasury during the present month, states that the fever is "fatal beyond precedent. Out of twenty-six officers connected with the Custom-House, only three are fit for duty. The remainder are either sick or dead." The victims in general are foreigners, who constitute a very important element in the population. The Commandant of the Fifth District (General Griffin) reports to his superiors under date Sept. 3, that "there is not an army surgeon in or around Galveston fit for duty, and that the regular medical practitioners of that city have more than they can possibly attend to."

The scourge appears to be still under control at Indianola, Lavacca, and Victoria—but not so at Corpus Christi or New Orleans, at which last, according to the declaration of the Health Board on the 3rd inst., it is now epidemic, but of mild type. Accounts from the West Indies are somewhat more favorable, particularly in the case of the more important towns—but from every quarter there comes the gratifying intelligence that the members of our profession are laboring manfully to stay the pestilence, in a spirit that is as self-sacrificing as it is commendable.

The cholera also seems to have gained a new impetus in certain parts of Europe. The United States Consul at Palermo, Italy, reports that "On the 31st of July, up to the time of the mailing of my last despatch, there had only taken place six or seven cases of cholera, but before the day was over they ran up to twenty-nine cases. On the 1st of August it went up suddenly to two hundred and eighty cases, and it has kept thus up to date, averaging from two hundred and fifty to three hundred cases daily. The lower classes, as usual, are the greatest sufferers; but it has, however, spread among the middle and even the upper classes. It is of a more violent and fatal nature than last fall, for hardly one-third of the attacked have so far got over it. The entire population is panic-struck; the greater part of the wealthy families have escaped to the Continent, the middle class have left the city and are staying in the villas and in the suburbs, and many of the laboring classes have gone up to the mountains and pitched tents in the open fields. The city has a very mournful aspect, and business is almost entirely suspended."

In the Calabrias, and Sicily, and a few of the northern provinces, the people add to their sufferings the dread of poison, which they believed to be administered through several malevolent agencies. Indeed, we learn from the *Gazette de France* that, "On rumors of cholera at Naples the populace rushed in a mass to the abode of a fortune-teller called the Sibyl, massacred her, and cut her into morsels."

The same paper adds in this connection: "The authorities have suspended the march of troops, fairs, and even the examination of students. At Naples all ships coming from Leghorn are placed under quarantine."

A letter from the Basilicata to the *Avenir* of Naples states "that the cholera is making terrible ravages in several communes of that province. In that of Miglionico, of which the population does not exceed five thousand souls, the number of deaths daily amounts to from fifty to sixty. Some families have been entirely destroyed." The disease has likewise appeared in Warsaw and in Danzick, and, if we credit the secular prints, "as a fearful epidemic."

In our own far west, up to the date of our present writing, the number of victims has not yet perceptibly declined—the Indian Territory, south of Kansas, having been sorely visited, and the population of Fort Gibson having lost fully thirty-seven per cent. of their whole number. From the other infected military stations we have little if any news, which we trust may be regarded as a symptom indicating a fair condition of the public health.

The coming of cool weather brings with it a disposition for renewal of work in medical circles. The different societies which have been enjoying a vacation

have resumed their sessions, and the preliminary lectures in the medical schools have been commenced. The number of medical gentlemen who have been recruiting their wasted energies upon their farms and country seats have returned with renewed vigor to practise their art, and everything points towards the possibility of a winter of more than ordinary activity in the medical line. The meetings of the societies are well attended, and an interest is manifested in their proceedings which is as gratifying as it is encouraging. The students are beginning to assemble from different quarters, and the prospects of good classes on the part of the colleges are as promising as they have been at any time heretofore.

Reviews.

A PRACTICAL GUIDE TO THE STUDY OF THE DISEASES OF THE EYE; their Medical and Surgical Treatment. By HENRY W. WILLIAMS, M.D., Ophthalmic Surgeon to the City Hospital, etc., etc. Boston: TICKNOR & FIELDS. 1867. pp. 421.

SOME time since we noticed the essay on "Recent advances in Ophthalmic Science," by this author.

The work now before us is a second edition, and contains as an appendix the essay above mentioned.

"In offering this treatise to the profession, and to those who are about to enter it, the author does not assume to set forth all which is known in respect to diseases of the eye."

The idea seems to be to give the student a general knowledge of eye diseases, "and to allow him to consult other works at his leisure, should he wish for complete information regarding them."

It does not seem to us that this is the correct aim in writing a monograph. Text-books for students on general subjects are the proper places to set forth *general* ideas of diseases. A practising physician who consults a work on a special class of diseases, expects to find in it a full account of the pathology, treatment, etc., which may be of use to him in the case that he is looking up. He does not wish "to consult other works at his leisure." Besides, we do not remember to have seen reference to a single author in the whole book, so where shall the general practitioner find, in other works, what he fails to find in this?

The great advances in ophthalmic science that have been made within the last few years, and the failure of works on practice of surgery to keep pace with this advance, do to some extent render necessary such a work as the present.

It is a very readable book, and by its perusal the physician will gain a very good idea of what can be accomplished by a skilled oculist, if he does not himself learn exactly how to treat eye diseases.

Throughout the work are various practical suggestions that are very useful, and which are original with Dr. Williams, who, besides being a careful student and compiler, has that rare qualification, in a medical man, of having an original turn of mind, which does not take all the accepted notions for granted. His modification of Bowman's probes for the treatment of lachrymal obstruction seems to be a valuable improvement. They are "made with bulbous extremities," and "with the third of the probe nearest the end much more slender than the remaining portion." They are made on the same principle as certain bougies for urethral stricture.

While speaking of the treatment of diseases of the cornea, Dr. Williams uses this expression: "If he act as a mere specialist, and attempt to gain his object by local remedies alone, his best endeavors will be baffled," etc., and "constitutional remedies are of quite as much importance as any local applications." Some oculists seem to ignore all constitutional participation when treating their eye cases. It seems to us that the use of tonic remedies, and attention to the general health, are quite as important, if not more so, than local applications, in the treatment of ulcers of the cornea, phlyctenular keratitis, etc.

And in syphilitic iritis the exclusion of preparations of mercury, and the entire reliance on atropine, seems at least injudicious. Adhesions of the pupillary margin are not the only evil results of the syphilitic poison; and the mere fact of a physician being a *specialist* gives him no right to let his patient suffer from any trouble not immediately in his line, while under his care. Therefore we think that Dr. Williams hardly puts the case strong enough when he says, "Where interstitial corneitis exists as a complication, the use of mercurials may be admissible." We should say indispensable.

The article on "inflammation of the meibomian and ciliary glands," is one of the best that we have seen on the subject. It will repay careful study. By carefully carrying out the plan of treatment here described, almost all cases of the disease in question prove curable.

The appendix would doubtless be as new to many physicians now as when it first appeared, and it is well worth a careful reading. The part on the ophthalmoscope, and the accompanying plates, give an excellent and simple explanation of that instrument and its use, as we have already noticed in our review of it, when issued as a separate work. The book as a whole is a valuable one, and creditable to its distinguished author, although we are constrained to repeat that a "guide" should be a little more minute, and a bibliography which would only take up little space, would greatly enhance its value. We commend the beautiful typography and paper and binding to the attention of the New York and Philadelphia publishers.

NOTES ON THE ORIGIN, PREVENTION, AND TREATMENT OF ASIATIC CHOLERA. By JOHN C. PETERS, M.D. 2d Edition with an Appendix. N. Y.: D. VAN NOSTRAND, 1867. 12mo., pp. 200.

THIS excellent and very readable work of Dr. Peters has advanced to a second edition, and we are pleased to notice the fact as an evidence of the appreciation with which the profession regards the labors of the author. Our readers are already acquainted with the intrinsic merits of this *brochure*, and we again take occasion to commend it to their careful perusal and study, as a work singularly complete in all those facts pertaining to cholera which the recent investigations of the ablest minds in the profession have given us.

THE MEDICAL REGISTER OF THE CITY OF NEW YORK AND VICINITY, to which is also added a nearly complete list of the members of the Medical Societies of the State of New York for the year commencing June 1, 1867. Published under the supervision of the New York Medico-Historical Society. JOHN SHRADY, M.D., Editor. New York: N. Y. PRINTING CO., 1867.

THIS very welcome annual comes to us much enlarged, compared with its predecessors, and under the charge of a new editor. Although somewhat delayed in its publication on account of the many additions which were thought necessary to be made, the profession will doubtless be unwilling to find fault with the circumstance in view of the remarkable completeness of the work. As it now stands it may be considered the per-

fection of a Register. No pains have been seemingly spared to make it in every respect a reliable book for reference on all matters pertaining to medical matters in the city of New York and vicinity. The list of practising physicians is as complete as the utmost care in canvassing the districts could possibly make it, while the office hours of all are accurately and reliably given. This latter feature alone is sufficient to recommend for the little volume a place upon the table not only of every practitioner in the city and vicinity, but of those throughout the adjoining States who may have occasion to send their patients to the city for purposes of consultation. By being reliably informed as to the time when the physician to whom his patient is to be sent can be found in his office, much time, trouble, and annoyance are saved.

It would be impossible to give in detail all the medical matters of interest which are referred to in this volume; but suffice it to say that we have presented to us an account of all the medical societies, medical institutions, hospitals, dispensaries, throughout the city, while all the officers of the county societies are given, and all the members of the same. The list of nurses, artificers in medical appliances, and instruments, and of regular educated dentists will serve as a guide to those who may be in need of recommendations.

The obituary notices are full, and are written with that ease, elegance, and taste which, even independent of the interest that may be taken in the subjects of the sketches, will command for them a wide reading.

We have not deemed it out of place in these columns thus to allude to the work before us. Although the editor is known to our readers as a valued contributor to our columns, it is no reason in itself why any outside emanations from his pen should not receive the same notice as would those of a stranger, and entitle us to the privilege of praising or condemning his efforts in absolute accordance with an impartial judgment. This part of our task we have endeavored faithfully and conscientiously to fulfil, and lay down the volume with our unqualified approbation.

THE MINERAL WATERS OF THE UNITED STATES AND CANADA; WITH A MAP AND PLATES, AND GENERAL DIRECTIONS FOR REACHING MINERAL SPRINGS. By J. J. MOORMAN, M.D., Resident Physician at the White Sulphur, Lecturer on Anatomy and Physiology, Roanoke College, Va., etc., etc. Baltimore: KELLY and PIET, 1867. 12mo., pp. 507.

As the work is written for the public, it cannot be expected to serve the purposes of a scientific treatise. It is true there is not a little, in a general sense, that may be of value to the physician in reference to the localities and properties of the different Spring waters, but further than this the book is seemingly written more to amuse than instruct, and will doubtless serve its purpose in filling up a gap in what the author chooses to call "Spring literature." The work is decently printed, and has scattered through its pages several indifferent lithographic representations of the different Springs and their surroundings.

ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE: A HANDY BOOK FOR STUDENTS AND PRACTITIONERS. By HENRY HARTSHORNE, M.D., Prof. of Hygiene in the University of Pennsylvania, Auxiliary Faculty of Medicine, etc., etc. Philadelphia: HENRY C. LEA, 1867. 12mo., pp. 417.

THE work before us is stated to be "an unambitious effort to make useful the experience of twenty years of private and hospital medical practice, with its attendant study and reflection;" and so well has the author accomplished his object that we cannot refrain, despite our prejudice against handy books in general, from pronouncing it a remarkable success. The arrangement of the subjects is most judicious and unexceptionable, and the manner in which he treats of the "essentials" of medicine is in the highest degree satisfactory to the reader.

The work is divided into two parts, the first referring to the Principles of Medicine, under which heading General Pathology, Semeiology, General Therapeutics, and Nosology are discussed; and the second, under the caption of Special Pathology and Practice, gives us an insight into the functional, systemic, and organic affections, with their diagnoses, prognoses, treatment, etc. Then follows a list of formulæ which the experience of the author has approved of in the different ailments, and lastly, a general index.

The introduction to the work gives us, in a remarkably concise and comprehensive manner, an exhaustive history of the different systems of medicine that have prevailed, and altogether, stamps Dr. Hartshorne as a scholar of no ordinary pretensions. The main part of the work is of a decidedly practical character, and the effort to condense every essential point in the smallest possible space gives a value to the book that is decidedly peculiar. We must not be considered as recommending the work for more than it really is, a simple record of the experience of a thinking and practical man, one who has given ample evidence that he understands what the title of his little book implies. We have perused it diligently, and we hope impartially, and lay it down with naught but commendation.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, JUNE 27, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

REPORT OF COMMITTEE ON DR. CUTTER'S SPECIMEN.

DR. ROGERS, as one of the committee appointed at the previous meeting to report upon Dr. Cutter's specimen of diseased spleen, offered the following:

The undersigned member of the committee of two, appointed by the President of the New York Pathological Society, to examine and report upon the true character of certain specimens presented to the Society at its meeting of the 12th of June, inst. by Dr. Cutter, at the request of the other member, Dr. Cutter, has examined the specimens, and reports that, after repeated and careful examinations of the specimens furnished him by Dr. Cutter, from both the stomach and uterus, he failed to discover any evidences of any kind of cancerous disease.

Even the physical character of the specimens furnished did not present anything abnormal. He wishes to be understood as making this report upon the material furnished him only, without even supposing that they were well selected and representative specimens of the alleged diseased structure. In relation to the cyst found attached to, or developed from the spleen, he found it to be a pure specimen of cholesteatoma.

The members of the Society who saw the specimen, will appreciate the following as a graphic description of its appearance to the naked eye; and your reporter testifies to its faithfulness, in respect to the microscopic appearances. It occurs in Mr. Paget's lecture on what he terms "Compound or Proliferous Cysts," at p. 393, and reads as follows:

"In the opposite extreme to these cysts, in which the cuticular product is most perfect, we find an innumer-

able variety of contents, of buff- and ochre-yellow, and brownish materials, that seem to consist mainly of degenerate cuticle mingled with sebaceous secretions. The microscope finds in them a confused mass of withered scales, of granular fatty matter, clustered and floating free, of cholesterine crystals, and of earthy matter in free molecules, or inclosed within the cells or scales, and all these may be floating in a turbid liquid, or retained in some soft tenacious mass, or clustered in hard, nodular, and pointed masses, projecting like stalactites from the old cyst-walls."

Nor in this character does it appear to be a unique specimen. Dr. Gross, in speaking of cysts affecting the spleen, remarks that they may contain a clear limpid fluid like spring water, in other cases they may be occupied by a sort of meliceric, atheromatous (which means composed more or less largely of cholesterine crystals), or steatomatous substances.

In conclusion your reporter begs leave to state, that while he declares that the portions of this cyst and contents submitted to him, were purely cholesteatoma, he does not deny that the cyst may have possessed other constituents, of a cancerous character. Mr. Curling cites several examples of cholesteatoma associated with malignant disease in the same tumor or person, and one case of this form of disease in a testis, with which enchondroma and encephaloma were combined.

URINARY CALCULI, ETC.

Dr. Post exhibited a urinary calculus which resembled very much the charms said to have been worn by the Roman ladies, being representations of the penis with the scrotum attached. It was removed by the lateral operation of lithotomy from a boy 13 years of age, who had complained of symptoms of stone in the bladder ever since he could recollect. The stone was readily detected on sounding, the sound emitted by the steel instrument indicating it to be of a light and porous nature. On introducing the forceps, the stone was seized by its small extremity, causing it to be broken, the larger portion being afterwards removed. The operation was performed at 2 o'clock on the Wednesday previous, and at 9 o'clock in the evening, having a desire to urinate, the patient passed a large quantity of urine tinged with blood. Since then he has had three discharges a day by the natural passage. The first evening after the operation the pulse was 130, attended with some febrile heat; it however soon subsided, and on the Monday following his pulse was 80, and he was able to get about the room quite comfortably. The calculus weighed 107 grains, was 1¼ inches in length, ¾ of an inch in breadth at the larger extremity, and $\frac{1}{16}$ at the smaller extremity. A small portion was analyzed by Dr. Wm. B. Lewis, and was found to be composed chiefly of phosphate of lime, with a small trace of the triple phosphate, and carbonate of lime.

He also exhibited a calculus, salivary in character, removed from the Wharton's duct of a patient 60 years of age. This body had existed under the tongue for 7 or 8 years, but had given no trouble until a month ago, when great difficulty of mastication was the result of its presence. When it was extracted it was found to have a remarkable prominence at one end, and was marked by tapering at the other. It weighed 28 grains, was ¾ of an inch in length, and ½ an inch in breadth at its broadest portion.

Dr. Bauer exhibited a specimen of aneurism of the arch of the aorta, for the purpose of affording the junior members present an opportunity of viewing a typical case. It was situated on the anterior portion of the arch, and by its pressure gradually absorbed the cartilages and ribs, as well as a portion of the sternum in its neighborhood.

EXTIRPATION OF INTRA-UTERINE FIBROUS TUMOR.

He next presented an intra-uterine fibrous tumor which he had removed by operation that morning. The diagnosis of the case had been made 5 years ago. The patient was 49 years of age and had four children, the youngest being 12 years old. Four years ago Dr. Bauer was called to attend her for hæmorrhage of the uterus, and on examining her carefully he discovered an intra-uterine tumor, probably fibrous. Dilatation was commenced, as it was necessary to do so in order to treat the symptom of bleeding. The treatment of dilatation was carried on to that extent that at the end of a year afterwards he could introduce his three fingers, and allow the tumor to come out. Soon afterwards the patient, formerly a resident of Brooklyn, had removed to this city. She went on occasionally having her attacks until she began to suffer from an extremely fœtid discharge, and having sent to a neighboring physician, and he having pronounced the case one of cancer, she became very much alarmed, and sent for her old attendant. Dr. Bauer, on examination, found the tumor protruding though the os, and also discovered that its fœtid odor was due to ulceration and sloughing of its lower portion. The only resource was the operation of enucleation, which was done without the slightest difficulty. It seemed to be attached directly to the mucous membrane, no distinct pedicle being discoverable. On microscopical examination it was found to be purely fibroid in character.

Dr. Weir, after exhibiting a specimen for a candidate, presented several specimens of the distoma hepatica, which he had accidentally met with in the rectum of a patient upon whom he was operating for extravasation of urine. The patient stated to him that he had been in the habit of passing them for several years. His life was terminated by diarrhœa. No post-mortem examination was made.

PENDULOUS ADIPOSE TUMOR.

Dr. Sayre exhibited an adipose tumor removed by operation from the outer portion of the right clavicle of a woman, 35 years of age, who, strange to say, had carried it for 8 years without an operation. She was brought to the hospital on account of hæmorrhage occasioned by ulceration into a large vein upon its surface. It weighed 1 pound and 9 ounces, and there were 9 large veins found upon its surface, and one large artery through its substance.

He also presented a tumor of the same character which he had some time before removed from the upper and inner portion of the right thigh, which had such a long pedicle that it had been diagnosticated by some who saw it as pediculated fibrous tumor.

Dr. Markoe remarked that the last tumor had pediculated on account of its weight, while there evidently did not exist such an attachment from the commencement as would have been the case in the pediculated tumor.

REPORT OF COMMITTEE ON DR. FINNELL'S CASE OF INTRA-UTERINE TUMORS CAUSING DIFFICULT LABOR.

Dr. Rogers then offered the following report of the committee to examine into the condition of the intra-abdominal tumors in the fœtus presented at the previous meeting by Dr. Finnell.

The undersigned committee, appointed by the President of the New York Pathological Society at the meeting of 12th June, 1867, to examine and to report upon the true character of the two tumors presented by Dr. Finnell at that meeting, respectfully report, that

the required examination has been instituted, and the following result arrived at:

The committee would first, however, beg leave to premise, that the history of the specimens as given by Dr. Finnell at the time of presenting them, having included the statement that all of the viscera of the ventral cavity were present, and in a healthy condition, and that it was a male fœtus whose testes were *not* sought for, nor examined, and consequently not known to be present, had, as the Society will recollect, directed the attention of some of its members to the fœtal testes, as the starting-point of the enormous tumors—enormous when compared to the healthy fœtal gland. The absence of any report relating to the testes of the fœtus, was indeed the chief cause of the necessity for the formation of the committee. For with a perfectly healthy condition of the abdominal viscera of a male fœtus, and the existence of two exactly similar tumors, perfect duplicates of each other, occupying the two lateral regions of the cavity, and each provided with a similar duct or vessel, this mass could scarcely be regarded as anything else than diseased testicle, had no testicles been found elsewhere.

In the absence of this important evidence, the committee were forced to resort to histological proofs in the formation of a conclusion as to the character of the growths. The form of the growth is that well known in pathology as *fibro-cystic*. The cysts are of all possible sizes, from an almost imperceptible vesicle to the quarter of an inch in diameter, and, as we believe, are lined by a delicate membrane, possessed of tesselated epithelium. At least this is the fact with the cysts large enough for examination.

On carefully dissecting the tumors, each one is found to have a duct or vessel, of sufficient size to admit a common probe. The microscope shows that this duct or vessel is lined by an epithelium of the columnar variety. Tracing it deeper into the substance of the tumor, this duct is found to be an outlet from a kind of sinus extending in the direction of the long axis of the tumors for about half its length. This sinus has several communicating, or tributary ducts leading into it from various parts of the tumor, and is precisely similarly located and provided in the two, and possesses the same variety of epithelium as the duct. Besides this duct, each tumor has a vessel of very small size, possessing all the characteristics of an artery, leading into its substance, another having the appearance of a small vein, and lined with scaly epithelium, and between these two vessels is also found a nerve branch accompanying the vessels in their distributions. Under the microscope, the nuclei of the neuralemma of this nerve twig are very distinctly visible, and render its nervous character unequivocal. These three are united in one pedicle or cord, and are located at a slight distance from the large duct. Now as this is precisely the histological description of the spermatic cord and the epididymal portion of the spermatic duct, and of nothing else, further proof in support of the belief that these tumors are examples of fibro-cystic disease of the fœtal testes does not appear necessary to the committee. Desiring, however, to leave no point uninvestigated, the following extract from Mr. Paget's lecture on fibro-cystic tumors, will explain why the committee extended its microscopic examinations. He says: "We find examples of fibrous tumors thickly beset with numerous well-defined and lined cysts. This appears to be the nature of the 'hydatid testis' described by Sir Astley Cooper. The specimens that I have seen of it make me think that it is essentially a fibrous tumor in the *testicle*, with cyst formation in the tumor. For, upon or around the tumor, the seminal tubes or their remains may be traced outspread in a thin layer, and without difficulty separable, and the substance of the tumor is a distinct mass of common fibrous tissue, with a variable number of imbedded cysts, filled with pellucid serous or viscid contents." The committee hardly expected to find any such layer of seminal tubes over this tumor—the size of, and very nearly the shape of half of the fully developed fœtal brain—for the fœtal testis, which is about as large as a medium-sized pea, spread out to that degree, could with difficulty be detected. But in the hope that it might have been differently disposed of, we commenced the microscopic examinations of various portions of the substance of the mass, and very soon found undoubted fragments, of both the straight and the convoluted seminal tubes, lined with their characteristic cells. The whole tumor contains vast numbers of spindle-shaped nucleated fibro-plastic cells, and exudation corpuscles, and in some regions much mingled with these seminal cells. These fragments of the testis seem scattered over a great part of the tumor, for we have detected them in portions taken from widely distant parts. The locality of these fragmentary portions of the testis is generally marked by a slightly yellow tinge of the substance of the tumor, and a less cystic character of the point thus tinged. These fragments are mostly located near the sources of the vessels or ducts we have described as tributary to the longitudinal sinus of the tumor, and can with great certainty be pointed out. All doubt, therefore, in the minds of the committee, as to the testicular origin of the tumors, has been removed. But as to the precise pathology of the tumors, the committee see difficulty in demonstrating that the disease was originally of the fibro-areola tissues of the testis or of the cell-tubes, that is, whether it was a pure fibro-cystic disease, or whether it was in part a glandular tumor of the testis. If it be in part what is known as a "glandular proliferous cyst," distinguished by the presence throughout its substance of structure exactly similar to that of the gland upon which it is developed, it can be so only to a small degree, for large portions of the tumor are devoid of such structure. The committee thereupon incline to the opinion that it is a pure fibro-cystic disease in the testis of the fœtus.

The committee entertain the theory, that the part of the duct present in the specimen, corresponds to the epididymis, and represents that part of the seminal duct in a straightened and dilated condition.

This view receives the confirmation of the best authorities upon the minute anatomy of the testis and its ducts; the epididymis being, according to them, the only portion of the seminal passage lined by columnar epithelium.

The longitudinal sinus represents the rete-testis in a dilated state, forming an irregular but common canal; and the tributary ducts opening into it are the diseased and dilated vasa recta of the original testis.

In conclusion, the committee would add, that it has been unable to obtain any information of the record of a similar case of fœtal disease, and that thereupon, so far as it knows to the contrary, this is an unique case in pathological history.

STEPHEN ROGERS.
F. C. FINNELL.
E. KRACKOWIZER.

EXECUTIVE SESSION.

Minutes of previous meeting read and approved.

Dr. G. H. Wynkoop was elected a member.

On motion, the Society adjourned until the second Wednesday in September.

Adjourned.

Correspondence.

"THE UTERINE ELEMENT IN PRACTICE" AGAIN.

To the Editor of the Medical Record.

Sir—In some of the operations now undertaken with the uterus, is there not some danger of doing harm, even endangering life? Can it be slit up, have its cervix dilated with sponge-tents, injections thrown into its cavity, etc., without any hazard, if discrimination and caution be not exercised? As bearing on this point, I quote a statement in the *American Medical Journal* in a notice of the Transactions of the Obstetrical Society of London: "Dr. R. Greenhalgh presented a paper on mechanical dysmenorrhœa, in which he states that he had operated upon nearly three hundred cases of this affection, with but few and slight casualties. In one there was rather profuse hæmorrhage, for which plugging was had recourse to. In about five others pelvic cellulitis ensued, a casualty which is by no means unfrequent after the use of sponge-tents. In one peritonitis was set up, and terminated fatally." Are such incidental casualties, resulting in one case in death, not to be taken into the account? Should they not admonish to the practice of some caution? Should they not hinder young practitioners from plunging headlong into uterine practice? There is no part of the physician's business that requires more accurate discrimination, and the specialty of the treatment of female diseases ought not, therefore, to be entered upon at the beginning, but it should be a gradual outgrowth from a general practice, gathering up its stores of diagnosis in the course of long years. This being so, it is not wonderful that we have occasional revelations of great blunders in the diagnosis and practice of newly-fledged practitioners in female diseases. I have known one, who flourished largely with the speculum, to mistake a head for a breech presentation, when the head could be distinctly felt passing down through the well-opened os uteri, showing that his touch was not well educated—however it might be with his sight—and I have known another to diagnose grave disease of the uterus and prescribe accordingly, when the occurrence of abortion, before the remedies were applied, revealed the true nature of the case. Other mistakes could be cited, but these will suffice. I remark, in passing, that the errors committed from lack of experience in those who undertake early in their practice to foist up a reputation for the treatment of female diseases are undoubtedly frequent, for the few that accidentally come to light must be a small portion of those which actually occur.

I have spoken in a previous article of the commonness of the error of supposing ulceration of the os uteri to exist when it does not. I have no doubt that quacks and demi-quacks (of whom we have many in our ranks) often call the slightest patch of redness an ulcer, or even pretend that one exists where there is not the shadow of disease to be seen on the organ. In this latter case the patient may appear to be cured by the local application, and may give the doctor great praise for having found out just what the matter is, as it is expressed, and for knowing just what to do. And yet it is the general remedies that have, of course, effected the cure, while he may have merely pretended to apply the nitrate of silver, or, if he has really applied it, his light touches have inflicted no damage that is not readily recovered from by the membrane. Indeed, I have no doubt that even when there is considerable of that lesion which I have spoken of as being by far more commonly found on the os uteri than any other, general treatment alone may often succeed without any local application—that it often did before the speculum was introduced into practice, though it is very certain that judicious local treatment may be of essential service in such cases. To attribute all or most of the symptoms to this lesion where it exists, as is often done, is a great error. In most cases it is a small part of the difficulty, and in many it is one of those local ailments that have their origin in a general condition. I will quote here what Guerin says of the symptoms attributed to the so-called ulceration:

"As the human mind has a great tendency to assign effects to causes which it can readily appreciate, the pains which women so frequently experience in their loins and abdomen have generally been attributed to ulceration of the uterine neck. This ulceration answers to all—pains of the stomach, of the kidneys, dyspepsia, hysteria, nervous affections of all sorts—everything is explained by excoriation of the uterine neck. After having examined many thousands of women, I think myself right in affirming—

"*First.* That these ulcerations cannot cause the pains which have been attributed to them.

"*Second.* That these pains are caused, in a very large majority of cases, by phlegmonous inflammation of the large ligament, by an ovaritis, a pelvic peritonitis, or by a hæmatocele, or finally by an intestinal lesion to which the physician gives no farther thought when he has discovered an ulceration, however slight, of the neck."

I remark, in passing, that it is doubtful whether the symptoms mentioned are as frequently to be attributed to these local diseases as Guerin states—very often they are either functional or nervous results, dependent, sometimes, undoubtedly, upon a morbid general condition, which must be relieved by general remedies.

Guerin thinks that the usefulness of the speculum has been vastly overrated, while that of the touch has been as much undervalued, of late years, in the investigation of the diseases of the uterus. If the question were between not using the speculum at all and using it as excessively as many do, I am free to say that the former is preferable—in other words, I believe that those who rely upon the symptoms, together with what they can discover by the touch, when that is necessary, really make out, in the great majority of cases, a more correct diagnosis than those who make so very much of the diseases of the uterus, and especially of its os, and use the speculum with great freedom. While the latter think, generally, altogether too much of the local disease, and perhaps sometimes find such disease when it has no real existence; the former, though indeed failing, sometimes, to appreciate truly what is local, will, with few exceptions, meet properly the necessities of the case. It is these exceptional cases that the speculum is needed to take care of fully. Practically the use of the speculum is required in some cases besides these, for disease of the os may be occasionally suspected where it does not really exist; but allowing all proper latitude for its use as a means of investigation, it need not be frequently employed.

There is one item in the practice of some who have so frequently found ulceration of the os uteri, that deserves a slight notice. It has been common to enjoin rest upon the bed for some time after applying the nitrate of silver. I have never found this necessary in any cases where I have applied it, that is, on account of its application, though it may have been sometimes necessary for other reasons. But the expedient certainly gives importance to the local treatment in the eyes of the patient, and is quite a useful part of the programme with the cunning and quackish physician.

Far be it from me to undervalue recent researches in uterine pathology, and the multiform contrivances for investigating and treating diseases of the uterus. At the same time I must say that while with many most flagrant abuses exist in connection with their treatment —often actually quackish—even with the best there is apt to be too much made of local disease, and not enough of that which is general. It is precisely as it has been with various local diseases from time to time —for example, to take a recent instance, what has been called the clergyman's sore-throat, an error which has had its day and is now fast passing away.

The practice of the abuses which I have noticed in the treatment of female diseases is doing much harm in various ways. It hinders from proper investigation, some being so disgusted with Balbirnie, and his succession of apostles of the speculum, that they will not use the instrument at all. It encumbers our journals and other records of the profession with false facts. Not only the statements of those who stoop to quackery, but those of men who have exclusive and one-sided views, mislead the profession and embarrass its investigations. And beyond all this, it brings discredit on the profession, and gives currency to that miserable delusion, the necessity of having female practitioners to be devoted especially to the care of female diseases. The honorable and high-minded physician never need to offend a true delicacy in using all necessary means for the investigation and treatment of disease, but unnecessary measures may so offend, and their influence is wider than in the particular cases in which they are used, and tends to mar the standing of the whole profession, and put it into a false position. *

ANOTHER NEW POST-MORTEM NEEDLE.

To the Editor of the Medical Record.

Sir—In the "Record," of July 15th, a post-mortem needle is described and illustrated, which, while supplying a more available means than the ordinary needle for the purpose, is yet surpassed by an invention that I beg leave to describe, and which I have found invaluable where many autopsies were to be made, and time precious.

It is the invention of an Irishman, the most wonderfully ingenious man I think I have ever met, but whose devotion to rum blasted every project, and brought him from the outset below the chance of fame. Among his thousand inventions, he had devised a sewing-machine for his wife, which was used in his home long before the possibility of such a machine had been demonstrated by a more energetic inventor, to the public. What his real name was, I cannot say; but at the time of his invention of the post-mortem needle, he had fallen to be plain dead-house man at Flatbush Hospital; and, to show how revoltingly debased the appetite for liquor may become, he would drink the alcohol from our choicest pathological specimens, and fill up the jars with water—but to the needle:

The instrument has a straight firm handle with a needle fastened into it like an awl, curved near the end and perforated at the extremity like the one referred to in the "Record" of the 15th inst. A common spool, holding the thread, is so placed upon the needle in its long axis near the handle as to easily revolve and cause the thread to unwind when necessary. The free extremity of the thread is passed through the eye of the needle, forming a loop.

The operation of the instrument is simple—it is passed through both edges of the cut, the loop of thread is then caught between the thumb and finger, drawn onward, the needle withdrawn as with an aneurism needle; the handle, needle, and spool are then passed through the loop and drawn tightly. The result is a lock-stitch.

The instrument has never, so far as I am aware, been presented to the profession; but it is so simple, so efficient, and may so readily be made, that it will commend itself. A more delicate needle would be a valuable addition to a pocket-case for ordinary wounds

Yours truly,

E. Holden, M.D.

105 Orange Street, Newark, N. J.

Obituary.

ALFRED ARMAND LOUIS MARIE DE VELPEAU,

of paris,

Whose death was announced by an Atlantic cable telegram as having occurred Aug. 23, ult., was born May 18, 1795, at Brêche in the department of Inde et Noir. The son of a poor, easy-going, kind-hearted blacksmith, who had destined him for the same trade, his advantages for even a rudimentary education were quite limited—so much so, indeed, that he learned to read from three books, which constituted his father's library. These, which at the age of ten years he could recite *verbatim*, were a treatise of *Hippocrates*, the *Rustic Mason*, and the *Poor People's Physician*. Having thus thoroughly mastered their contents, he began to practice writing, and soon became proficient enough in arithmetic to keep his father's small scores.

About this time a curate who had been sent to Brêche, opened a school for gratuitous instruction, at which the most attentive and eager student was our eminent surgeon of the future. The death of this preceptor, at the end of only a four months' residence, again interrupted his plans. In his sixteenth year, however, he was befriended by a physician from a distant village, who procured for him the privilege of prosecuting his studies in the family of a wealthy gentleman. This mine, it is needless to say, was well worked.

Having taken up his residence at Tours, a populous town some eight leagues distant from his birthplace, he became, after only fifteen months of study, the envied possessor of the diploma of "Officier de Sante," and soon after "Interne" of the Hospital. These honors he attained while practising the most rigid economy, living, says one authority, "on a scanty supply of coarse bread and cheese, sent to him once a week by his thoughtful mother." He subsequently became first-assistant to Monsieur Bretonneau, surgeon of the hospital at Tours, attending to his private patients and occasionally collecting a well-earned odd fee on his own account, —all of which brought him into notice, and indirectly added to the income of two hundred francs allowed by the hospital to servitors of his grade.

An affair of the heart, however, in which a fickle maid played an important part, provoked him to abandon Tours for Paris, supplied only with a loan of ten Napoleons and a letter from his friend, Monsieur Bretonneau, to the excellent Dr. Jules Cloquet. Here, studying, following the hospitals, and still fighting hand-to-hand with his old enemy, poverty, he was advised by Dr. Cloquet, whom he soon numbered among his friends, to take his chance at the public Concours, an institution which looked for only one qualification in a candidate, ability to stand the test of its examination. In this way he won his position in the Hospital St. Louis, where he remained three years. He is next found the

private assistant of Monsieur Bongon, surgeon to the Duke de Berry. The Concours now awarded him still another honor, that of "Aide d'Anatomie" to the faculty. In May, 1823, he graduated, and in the following year was appointed "Professor Agrégé." A surgeon of the Bureau Central in 1828, he still found means for constant improvement, and although an acknowledged chief, the impartial Concours refused him the chair of "External Pathology," which he so obstinately contested. In 1830, the Concours returned three names for the Obstetrical Chair as equal in merit—Moreau, Dubois, and Velpeau, the first of whom was chosen. In his last contest, which was in 1835, he won the chair of Clinical Surgery.

Velpeau was a member of most of the scientific bodies with which Paris abounds, and in 1859 attained the dignity of "Commandant in the Legion of Honor." A judicious operator, a voluminous writer, a lucid lecturer, and an indefatigable student, he well deserved the title given him by one of his admirers, of "King of Surgeons." He died of nephritis.

MICHAEL FARADAY, D.C.L., F.R.S.,

OF LONDON.

Prof. Faraday, the eminent English chemist and natural philosopher, who died in London, England, August 27, 1867, was born in Surrey, England, September 22, 1791. His father being a working smith, the deceased was unable to obtain other than the most ordinary education at a common day-school. When a lad of thirteen years, he was apprenticed to a London bookbinder, and having, through his position, the means of obtaining several scientific works, he studied them carefully, and by the assistance of a treatise on electricity, was enabled to construct his first electrical machine with a glass phial. Subsequently, through the kindness of a member of the Royal Institution, Mr. Faraday obtained permission to attend the last four lectures of Sir Humphrey Davy, in 1812. He afterwards sent to the kind-hearted philosopher a copy of the notes he had taken, and requested his assistance to enable him to "escape from trade, and to enter into the service of science." Sir Humphrey, after ascertaining the ability of the applicant, promptly complied with his request, and made him his chemical assistant at the Royal Institution. The deceased subsequently travelled throughout Europe as the assistant and amanuensis of his patron, and on his return to England resumed his position at the Royal Institution. The progress of Mr. Faraday was now rapid and successful. In 1820 he discovered the chlorides of carbon; in 1821 the mutual rotation of a magnetic pole and an electric current, and in 1823 his exertions led on to the condensation of the gases. In 1833 he became the Professor of the new chair of chemistry at the Royal Institution, a position he ever after held. The honors which his own and foreign governments and institutions bestowed upon him for his services to science were numerous. He was a Commander of the Legion of Honor, Knight of the Prussian Order of Merit, Fellow of the Royal Society, Doctor of Civil Laws, one of the eight foreign Associates of the Imperial Academy of Sciences at Paris, besides being a member of many learned and scientific bodies in Europe and America.

Dr. JAMES JACKSON,

OF BOSTON, MASS.

The Boston papers announce the death of this physician as having occurred August 27th, at the age of ninety years. Dr. Jackson was a native of Newburyport, Mass., where he was born on October 3, 1777. In 1796 he graduated at Harvard College, and in 1802 was admitted to the Massachusetts Medical Society. He soon won a high position in his profession, and in 1812 became Professor of the Theory and Practice of Medicine in the Harvard Medical School, which position he held for twenty-four years. He was also one of the founders and physicians of the Massachusetts General Hospital, and was elected President of the Medical Society several times. About eighteen months ago his faculties suddenly failed, and thenceforward his physical powers gradually declined. His death appeared to have been caused more from old age than from any local disease.

J. MASON WARREN, M.D.,

OF BOSTON, MASS.

Dr. J. Mason Warren died at his residence in Boston, of cancer of the bowels, Aug. 20. Thus, another bright light in American surgery has been extinguished. Dr. Warren's family is well known in the medical history of New England. The names of his father, Dr. John Collins Warren, and of his grandfather, Dr. John Warren, will always be associated with that of Mott, as pioneers in the surgical field of America. With the rich inheritance of his name, and, in our opinion, with more ability than his father or grandfather, though with less sternness of character, and less desire to attain notoriety, Dr. J. Mason Warren acquired a large surgical practice, and was undoubtedly looked upon as the greatest surgical authority by the public of New England and the British Provinces.

It was the writer's good fortune to have served under Warren at the Massachusetts General Hospital, and in later years to have met him often as a friend. Pleasant is the memory of those days passed in intercourse with Townsend, Heyward, Bigelow, Sam. Parkman, and Warren, of whom only Townsend and Bigelow still remain. Where else could be found a surgical corps of such genial, honorable men, and such able enthusiasts in their profession? Each had his peculiar traits, each his special excellencies.

To us internes, or "pupils," as the Trustees of the Mass. Genl. Hospital have unwisely dubbed the house staff of that institution, Warren's *forte* was the conscientious care, and the assiduous attention which he devoted to every patient who came under his charge. Others could operate with more apparent boldness, and with greater coolness than he. Before a serious operation he would vent his nervous excitement by walking up and down the amphitheatre aside. His hand might tremble as he took the knife; but once the operation commenced, all signs of agitation ceased; then no fingers were steadier than his, no greater skill and delicacy of manipulation could be shown. But it was *par excellence* after the operation that Warren won our admiration by his rare combination of the physician with the surgeon. Early and late, if circumstances required, and at the sacrifice of private practice, he would visit the hospital and watch over his patient. The minutest detail received attention. Every contingency was provided for. The richest man on Beacon street could have received no greater care. It is hardly necessary to add, that he thus endeared himself to every patient, and commanded the esteem of his assistants. His success as an operator was also dependent in a great measure upon this fact.

In all our dealings with him as internes, Mason Warren was always the same—kind, considerate, gentlemanly, at the same time that he was exacting in the rigid performance of our duties; not from the policy which might lead some "visiting surgeons" to mend

their ways, but from the kindly nature born in him. His intimate friend and fellow-student, Dr. Oliver Wendell Holmes, in a touching tribute to his memory, such as Holmes only could write, says, that in all their intercourse he never knew of an unkind or harsh word between Warren and his associates.

With less modesty and less of a retiring disposition, and with more desire for fame, Warren might have secured a wider reputation, to which he was fully entitled. His contributions to surgery were chiefly reports of cases, published in the current medical literature of the day. He, however, lived to complete a most elegant work, which will remain a monument to his memory and an honor to American surgery, entitled "Surgical Observations, with Cases," and bearing the date of 1867.

We have lost in Warren a skilful surgeon, a true friend, a noble and upright man. B.

DR. JOHN HART,

OF NEW YORK.

At a regular meeting of the "East River Medical Association of the City of New York," held September 3, 1867, the following preamble and resolution were unanimously adopted:

Whereas, It has pleased the Almighty Ruler of the Universe to remove from our midst Doctor John Hart, a valued friend and associate; and

Whereas, In the loss of one so intimately connected with the East River Medical Association, and so prominently and honorably identified with its existence and aims, it becomes us as members of the Association, to give an earnest expression of our great sorrow in this untoward bereavement; therefore, be it

Resolved, That as a conscientious practitioner of medicine—as a genial friend—as a zealous member of this Association (of which he was one of the originators)—as an exemplary and faithful presiding officer—his character has commanded our respect, and his memory will always be cherished.

Resolved, That a copy of the foregoing be published in the medical journals of this city.

TRUMAN NICHOLS, M.D.,
R. J. O'SULLIVAN, M.D.,
WM. NEWMAN, M.D.,
Committee.

New Publications.

BOOKS AND PAMPHLETS RECEIVED.

MICRO-CHEMISTRY OF POISONS, INCLUDING THEIR PHYSIOLOGY, PATHOLOGICAL AND LEGAL RELATIONS; adapted to the use of the Medical Jurist, Physician, and general Chemist. By THEO. G. WORMLEY, M.D., Prof. of Chemistry and Toxicology in Starling Medical College, and of Natural Sciences in the Capital University of Columbus, Ohio. With seventy-eight illustrations on steel. New York: Baillière Bros. 1867. 8vo., pp. 668.

CHEMISTRY. By WILLIAM THOMAS BRANDE, D.C.L., F.R.S., L. & E., of Her Majesty's Mint, and ALFRED SWAINE TAYLOR, M.D., F.R.S., Fellow of the Royal College Physicians of London. 2d American edition, thoroughly revised. Philadelphia: H. C. Lea. 1867. 8vo., pp. 764.

ELEMENTS OF MEDICAL CHEMISTRY. By B. HOWARD RAND, Prof. of Chemistry in Jefferson Medical College. Philadelphia: T. Elwood, Zell & Co. 1867. 12mo., pp. 399.

THE PHYSIOLOGY OF MAN, DESIGNED TO REPRESENT THE EXISTING STATE OF PHYSIOLOGICAL SCIENCE AS APPLIED TO THE FUNCTIONS OF THE HUMAN BODY. By AUSTIN FLINT, Jr., M.D., Prof. of Physiology in Bellevue Hospital Medical College, N. Y. Alimentation, Digestion, Absorption, Lymph, and Chyle. New York: D. Appleton & Co. 1867. 8vo., pp. 556.

PHYSICIAN'S VISITING LIST FOR 1868. Philadelphia: Lindsay & Blakiston.

INJURIES OF THE EYE, ORBIT AND EYELIDS, THEIR IMMEDIATE AND REMOTE EFFECTS. By GEORGE LAWSON, F.R.C.S., Eng., Assistant Surgeon to the Royal London Ophthalmic Hospital, Moorfields, etc. Philadelphia: H. C. Lea. 1867. 12mo, pp. 408,

Medical Items and News.

PERSONAL.

Professor Agassiz is superintending the illustrations for his "Journey to Brazil," the work being all written and in the printer's hands.

Surgeon P. G. S. Ten Broeck has been ordered to Fort Preble, Maine, to relieve Assistant Surgeon F. Le B. Monroe.

PROF. HYRTL, of Vienna, received a gold medal at the last Paris Exhibition for his anatomical preparations, and Prof. Trichmann, of Cracow, the bronze for the same. Dr. Politzer, of Vienna, received an "honorable mention."

AUSTRALIAN LEECHES are just now threatening to compete with those of the Swedish and Hungarian variety. They are principally collected in and near the Murray river, and it is said that sometimes 250,000 are shipped by a single steamer for the English market.

THE CHEMICAL NEWS AND JOURNAL OF PHYSICAL SCIENCE.—Messrs. Townsend & Adams, of this city, have undertaken to republish in this country this well-known and highly esteemed British periodical. It is to be issued in monthly parts instead of being, as is the original, a weekly issue. It is, typographically speaking, well executed. The enterprise of the publishers deserves substantial support.

GILDING BY AMALGAMATION.—M. Dufresne, of Paris, has introduced a new process for gilding. He first covers the article to be gilded by decomposing a basic salt of mercury, by means of a galvanic battery, then precipitates gold by the same means upon it, and lastly covers the article with another deposit of mercury. The article is then heated in a furnace until the mercury passes off as a vapor, when the coating of gold is found adhering to every part of the surface. If the volatilization of the mercury is carried on in a close furnace, there will be no danger to the workmen.

THE NEW YORK CITY INEBRIATE ASYLUM.—The building about to be erected by the Commissioners of Public Charities and Correction upon Ward's Island, N. Y., for the reclamation of drunkards, will be of brick in the mediæval style of architecture, with Mansard roof and ventilating turrets. In its construction the pavilion plan will be adopted—the pavilions to be each 39 feet wide by 121 feet long, and the corridors 17 feet wide by 58 feet long.

The expenditures, with a view to ensure the modern improvements in the matter of ventilation, heating, wash-rooms, water-closets, baths, etc., will be on a liberal scale.

A NEW METHOD OF PRESERVING THE DEAD.—There is now on exhibition at the New York Morgue the body of a drowned man supposed to have been in the water for three days prior to its recovery, and which is being

subjected to an experimental preservation. It is inclosed in a metallic case, made perfectly air-tight, and, as yet, although forty days have elapsed since the commencement of the experiment, shows no signs of decomposition. This result is obtained by forcing the air from the case and supplying its place with a certain gas, which the discoverer, we regret to state, is inclined to keep secret. He even expresses the belief that the body in course of time will become as hard as stone.

Professor Follin, the distinguished Surgeon and Oculist, who died in Paris lately, was forty-three years of age.

A new Hospital (pavilion) is to be built in Berlin.

Dr. Meadows, of London, has been elected an honorary member of the Obstetrical Society of Berlin.

Dr. Racle, Assistant Professor in the Paris University, is dead. He was so poor, although a famous author, that the cost of his burial was paid by his colleagues.

The Cattle Plague has appeared in the province of Old Castile, in Spain.

The Percentage of Deaths in the Hospitals at Hong-Kong is quoted at thirty-three and a half. This is said to arise from the fact that Chinamen are only brought to the hospital by their friends when in a dying condition. Some place those who are dying out of doors, in order to save the cost of burial, when they are picked up and carried to the hospital by the police.

The Exhaustion of the Native Population of the Sandwich Islands, which has been going on for a great number of years, seems to be accelerated of late. During the last six years there has been a decrease of over 9,000. The death rate among the natives is now about 1,500 a year over the births; and with an increasing ratio, this decimation will work the extinction of the race in a quarter of a century. European, but more especially Californian enterprise, already sways the development and the institutions of these islands, and the proximity and unequalled energy of our Pacific States must inevitably draw them at no distant day under the protection, if not the possession, of the Union.

New Base for Artificial Teeth.—Dr. G. F. J. Colburn, of Newark, N. J., has invented a substitute for rubber in dentistry, which promises to be of much value to the profession. It is in reality a cement of which mineral asbestos is one of the ingredients. Asbestos is a very peculiar substance. It is exceedingly light, and so very fibrous in its nature that it may be spun and woven like cloth, in which condition it resists fire, water, and many of the acids with complete success. Taking advantage of these natural qualities, Dr. Colburn has, by long study, discovered additional substances, which, when united, form an artificial base that possesses remarkable toughness, adherence, strength, and lightness. The ease and freedom with which it can be moulded is a strong recommendation. It can be readily applied to gold, platinum, and other plates. We have seen some full sets of teeth on aluminum plates that were truly beautiful. This new base contains no ingredients injurious to the health of the mouth or system. It is not affected by acid secretions, is free from all taste, and is inodorous.—*Scientific American.*

Remarkable Preservation of Beef.—Some beef which was deposited in tins beneath a heap of stones in Spitzbergen, by Capt. Parry, in 1827, was recently discovered, and a portion was cooked and eaten at a supper in Stockholm, after being preserved for forty years.

A New Method of Vitrifying the Surface of Iron has recently been introduced in Paris. Instead of covering the surface of the iron, according to the usual method, with a very fusible glass in powder and then bringing the iron to a red heat, the materials of the glass are laid upon the iron, which is heated until perfect vitrification takes place. The consequence is that the iron becomes oxidized, and combining with the silicic acid, the iron and glass form one substance. The coating may be as thick as desired, but it is found in practice that a thick coat of glass soon breaks away, while a thin one lasts for a long time. The method is being applied or tried upon armor plates for ships.

The Legion of Honor.—It is calculated that 64,000 persons wear decorations of the Legion of Honor. What chance is there for being *distinguished* in such a crowd?

Decoction of Sage in Profuse Sweating.—M. Vignard, of Nantes, after the manner of Van Swieten, has successfully employed decoction of sage for the relief of profuse sweating. In the case of a man twenty-five years of age, who had suffered, from time to time, during many years from attacks of this kind, the remedy proved effectual. The sweating began suddenly between two and three o'clock in the morning all over the body and was so profuse as to completely saturate the bed-clothes, and to a considerable extent the mattress also. In consequence of the regularity of the attacks, sulphate of quinia was tried as an antiperiodic, but unavailingly; the perspiration regularly reappeared, and without any apparent pathological cause. At length M. Vignard prescribed the following preparation: Take of chopped sage leaves a large teaspoonful (*une forte pincée*); of water, six fluid ounces. Boil the sage for a minute or two in the water; let it stand to cool, then filter and sweeten to taste. From that time the perspiration ceased whenever the decoction was taken, but reappeared when it was omitted. M. Vignard suggested the use of this remedy in the colliquative sweating of phthisis.—*Journ. de Méd. de Nantes.*

To Beautify the Teeth.—Dissolve two ounces of borax in three pounds of boiling water, and before it is cold add one teaspoonful of the spirits of camphor, and bottle for use. A tablespoonful of this mixture, mixed with an equal quantity of tepid water, and applied daily with a soft brush, preserves and beautifies the teeth, extirpates all tartarous adhesion, arrests decay, induces a healthy action of the gums, and makes the teeth pearly white.—*Ex.*

A Cheap Glass-Cutter.—The *Druggists' Circular* gives the following description of a cheap glass-cutter: —Take an old three-cornered file, heat it red hot, and plunge it into a previously prepared mixture, of equal parts of snow and salt, stirring it about so as to cool it as quickly as possible. Then grind the point on a wet stone, preserving the three sides as nearly as possible, and it is ready for use. Lay the glass to be cut on a perfectly smooth surface, apply a thin flexible rule, and draw the point of the file quickly over the glass. A litttle practice will teach one how hard to bear on without fracturing the glass. To insure success it is needful to notch the edges of the glass at the extremities of the scratch. The file can be reground when it becomes dull. Such an instrument will doubtless be found serviceable for cutting glass in the laboratory, and may be used as a good substitute for the diamond, and all ordinary purposes.

Students in Germany.—There are about 2,500 students of medicine in Germany, exclusive of Austria and Bohemia.

Original Communications.

SEA-SICKNESS.

OBSERVATIONS AND DEDUCTIONS FROM PERSONAL EXPERIENCE.

By WM. MASON TURNER, M.D.,

PHILADELPHIA.

An article by Dr. Armand, in the *Gazette Médicale de Paris*, suggested the following remarks:

A good deal has been written on this complaint, which for several reasons we might designate as singular. For many years it has been noticed. The *nausea navigatium* of the Latins, the *mal de mer* of the French, the *seekrankheit* of the Germans, and the *mareo* of the Spaniards, all correspond to our *sea-sickness*, and has been written of in as many tongues as above given. The grand point which has been discussed, and which is at issue now, concerns the *cause* of the affection. The answer seems ready enough to any question of this nature. It appears very natural to say that the cause of sea-sickness is—the *sea*, of course! There is truth in the answer, of a verity; and yet that answer may be forced to mean almost anything; for instance, that (1) sea-sickness is occasioned by the *sight* of the sea; (2) by the *peculiar odor* arising from the sea-water; (3) by the *calmness* of the sea; (4) by the *pitching* of the sea; (5) by the rolling of the sea, and so on, *ad infinitum*, or *ad nauseam*, at least. On many of these circumstances, or peculiarities, it has indeed been contended, depends the true cause of the sea-sickness. The distressing phenomena of the complaint are known either by experience, by sight, or by hearsay, to almost every one. It is useless to say anything on that head. It has been known, in some instances, to produce death by its violence, by occasioning hæmatemesis, by rupturing aneurisms, and by producing abortion in cases of advanced gestation; of course, the fatal results here being the effect of the violent effort to vomit, and the collateral forces called thus into action. The *cause*, however, as I have mentioned above, is chiefly deserving of interest, as it regards sea-sickness. It has been stated as different by a dozen different authors. At one time it was thought to be the specific odor arising from salt water, or an absence of the peculiar atmosphere which floats over the land. Again, for a long time, it was considered to be the unnatural motion imparted to the viscera of the abdomen and to the stomach, occasioning them to rub against each other, thus producing the nausea. Again, it has been contended that it is owing to an improper or irregular circulation, which leaves the brain badly irrigated. The grand nerve-centre being thus deranged, the stomach, by the intimate relation it sustains to it, is secondarily affected through the sympathetic system, and we have the result—nausea and vomiting. Some have explained sea-sickness by comparing the fluids in the body, so far as ascent and descent are concerned, to the mercurial column of the barometer, *i.e.*, that the body being unnaturally placed—thrown or tossed about, as is the case in swinging—the blood has an unwonted tendency to the brain, on which it presses, impairing its functions; then, secondarily, the stomach partakes of the derangement, and we have nausea and vomiting. Yet, again, it has been argued that *perverted vision*, occasioned by unusual impressions produced on the brain through the retina (I mean through or by means of the retina as the medium), is the true cause of sea-sickness. Dr. Armand espouses this view *in toto*. It was that feature in his article which arrested my attention, and made me at once condemn his position as untenable. Such I can readily prove it to be. To this, however, I will come anon.

So far as regards the odor theory, very little need be said. We have undeniable facts to prove this cannot be the cause. Some of our fishermen who live on Cape Cod have their houses so near the waves of old ocean, that the spray dashes into the doors. Here we have every odor from the sea which it is possible to have; saline incrustations cover everything, and the atmosphere is what might be termed *excessively marine*. What effect is visible in the inhabitants? Nausea and sea-sickness? No! rosy cheeks and hardy frames.

There is truth, however, in the theory of the unnatural motion imparted to the abdominal viscera; and, likewise, in regard to the opinion that sea-sickness is occasioned by an inequality of the circulation which leaves the brain impoverished. The barometric-mercury-column solution is not now generally received, and for good reasons. How could the theory prove true in practice, in regard to persons who occupied a horizontal position throughout the voyage, in which case the blood pressure on the brain amounts to nothing, or almost nothing?

It is with Dr. Armand's view, however, that I have particularly to deal, that of tracing sea-sickness simply to *perverted vision*. For the sake of doing him full justice, I quote the Doctor's words: "In some people it (sea-sickness) is produced if they *look* out of a carriage at the sides of the road and *watch* the trees, apparently in rapid motion."

I have italicized the words "look" and "watch" to call attention to the fact that the Doctor has the vision intimately concerned. Again: "All these circumstances, including *sailing*, have this in common, that they give rise to an interference with the laws of *perspective*, produce *perversion of vision*, cerebral fatigue, and a whole series of sympathetic phenomena, reacting from the brain upon the stomach and the entire organism. A proof that the fatigue of the *eye* is, in these cases, the chief cause of the peculiar feeling is, that after having waltzed, the most certain means of getting rid of vertigo is to *shut the eyes* for an instant; while on board ship a pretty sure means of avoiding sea-sickness is to *look* steadily on one point; a better still is to lie down and *close* the *eyes*."

The italics in the entire quotation are mine. From the extracts given, the Doctor's views are manifest. His grounds can be soon rendered untenable. I have, myself, seen considerable experience on the Atlantic, Mediterranean, and in St. George's Channel. During my voyagings I have experienced weather such as *old salts* say they never saw before, and never desire to see again. In storm or calm I paid a strict attention to sea-sickness, endeavoring to determine on some particular and certain cause for it. I am pretty well prepared to speak of it, both from observation and experience.

In May, 1859, I sailed as surgeon in the American packet ship "Admiral," from Havre in France, to New York. During the voyage I took especial pains to note the amount, the degree, and apparent cause of the sea-sickness, of which there was much throughout the passage, and to observe, particularly, the peculiar state of the patient, as regarded the respiratory organs, digestive apparatus, etc. From summings up in my note-book I learned the following when I arrived in New York. 1st. That, in the calmest weather, so far as the *sea* was concerned, no matter how great our rate of speed (and we frequently had fine breezes, while the sea was smooth) *there was less sea-sickness*, showing that impressions made on the corpora quadrigemina through the medium of vision, by passage through the water,

had no effect. 2d. That the worst sickness, and most of it, we had when the ship was laying-to, against head-winds and head-seas, and when she was alternately pitching in the chops and rolling in the troughs of the sea. This was when we were motionless, so far as regarded onward progress, and our only motion was an undecided, reluctant, very slow drifting to leeward, attaining, perhaps, the rate of a quarter of a mile in an hour, a speed which would not "pervert" the "vision" by any means, and could not, for the poor emigrants were huddled together in the "'tween-decks" of the ship, below water-line, where at mid-day the apartment is as dark as at midnight. The vision could not be perverted in this case, and could not have occasioned the sea-sickness. 3d. Again, in perfect calms, as regards the winds, when the ship did not even have steerage-way on, when a long, sullen, lazy roll was on the sea, the remnants of a late gale, sea-sickness was ever on the increase, though not so bad as in a chopped sea, as noticed above. This was the case when we were crossing the grand banks of Newfoundland Sometimes, in this latitude, the breeze died away so completely that we fished. The vision was not perverted here, no more than when we stand on the beach at Cape May or at Newport. 4th. In regard to the patients, I observed that those most affected had crammed to surfeiting their generally healthy stomachs with every kind of food before coming aboard. This point was particularly noted. Again, those persons who, presuming on the strength of their stomachs on land, had dared to go to sea on such presumption, were most often and speedily laid low. On the other hand, those whose digestion was bad on land and on sea, who had been suffering for some time with liver or general dyspeptic complaints, were most exempt from the malady. From this it might be inferred, generally, that those who were in ill health were least liable to sea-sickness, by reason of the already unsusceptible state of the stomach, liver, or brain, the latter perhaps primarily This leads, very naturally, to what I consider the most tenable reasons given for a certain train of circumstances causing sea-sickness. I will defer this, however, yet a moment.

In refutation of Dr. Armand's propositions or conclusions concerning perversion of vision causing sea-sickness, I have brought illustrations *au contraire*. First, in observation (1), where swift passage through water, in calm seas, with good winds, produced the least bad effect; and secondly, in observation (2), when in a heavy gale, chopped sea, and vessel laying-to, when all the emigrants were below and *out of sight* of everything; in other words, where vision was not called into play at all, there was most sea-sickness. More than that—and I am indeed thankful to be able to report this particular point—there was a man aboard the "Admiral" who was entirely blind, having a hard cataract in one eye, and corneal opaqueness complete in the other; a man who had not seen for twenty years—who could not tell day from night—yet that man was violently sea-sick for thirty-eight days; in fact, from the time we left the "Channel" until we made Sandy Hook. "Perverted vision" with a vengeance! Again, how can it be possible that perverted vision could have occasioned sea-sickness in one who kept the state-room and the bed from port to port? I hold just such a case now in my memory. A lady, on the French steamer "Meandre," was sea-sick from the time she left Marseilles until she landed at Alexandria, in Egypt. Yet she never stirred from her state-room, which was below the saloon-deck, and where there was no light scarcely, which she avoided altogether by closing the dead-light and foregoing the use of the lamp. So much, then, for Dr. Armand's *fatigue of the eye* and *perverted vision*, which to a blind man and to a woman shut up in what might be termed a "black-hole," is somewhat out of the ordinary path of logic,

From careful observation, I attribute sea-sickness simply and entirely to the peculiar motion of the ship, which motion affects, by deficient circulation, chiefly both brain and stomach—it matters not which first. Moreover, I think it attacks especially persons of a healthy organization, the more so where the viscera, as the stomach, has just been imposed upon, and tampered with. Generally speaking, we must conclude that the stomach is primarily affected by the unwonted motion, and that the dizziness, headache, etc., are secondary and dependent. We all know when we strike a person over the epigastrium, the blow will occasion vertigo, and sometimes complete unconsciousness. If we strike the same person a blow on the head, vomiting ensues as in concussion. This shows an intimate relationship, or, as a Frenchman has said, the *existence of two brains*.

It is very true that waltzing, and riding backwards in a carriage, will frequently produce in certain persons a nausea, approximating to sea-sickness. I think both are due to the same cause. In waltzing there is a wheeling around, an unnatural motion which throws the brain and other viscera into abnormal positions, hence the effect. In this case it cannot be denied that the confused blending of so many objects hurriedly and promiscuously together on the retina tends to increase this feeling. But at sea these objects are not present to blend together; there is nothing outside the ship save the limitless sky and water, a stray blackfish, an occasional swarm of Mother Carey's chickens, and a solitary gull! As to riding backwards, I speak this much from experience: When shut up in a close carriage and jolted over a rough road, I am sick at the stomach—virtually *sea*-sick, and it matters not whether I look out of the carriage window, or keep my eyes closed. This effect is not produced when I am on a smooth road. Many times have I rolled in a carriage over the gravelled drives in the Bois de Boulogne, near Paris, and, although going backwards, I never experienced any sickness at the stomach. It might well be asked here, if vision is at fault in riding backwards in a carriage, why is it that persons are less apt to be sick in an *open* carriage, where vision is not obstructed? Why, again, is it that those who are made sick by riding backwards in a carriage are never, or seldom at least, affected when riding backwards in a rail-car. I am an individual example as regards this point also. I have travelled backwards in American, French, English, German, Italian, Swiss, Austrian, and Egyptian rail-cars, where one-half of the passengers, from the peculiar construction of the carriages, *must* ride backwards; yet I never saw, in this experience, a case of perverted vision, with its consequent nausea. We never hear of a person being sea-sick on a river steamer. Who was ever thus affected when steaming up the Hudson or down the Mississippi? Yet the vision has certainly every *inducement* to become confused. We often see the sailor made sick when he first goes ashore from a long cruise. He is accustomed to tread his decks, to the ceaseless roll of the ocean. On land he *forgets* this peculiar (*his* customary) mode of perambulation; he raises his foot and lists to port and starboard, to windward and leeward, expecting, from habit, to be met half-way, but he misses stays and is soon abeam-ends, for the ground is a fixture. Vision is not here at fault, but the man *is sick*, and we know why. As regards the cure of sea-sickness, little can be done. The different viscera *must be habituated* to their unnatural motion and to the inequalities of circulation thus produced. A good plan is to wear a broad bandage tightly around

the abdomen and stomach, and try to "*tough out*" the sickness by braving the weather, and in storm or shine keeping the deck and learning to walk it. Lying down amidships *relieves* sea-sickness. So far as remedies (medical) are concerned, calomel, citric acid, the fluid extract of valerian, and the oxalate of cerium have been recommended.

The advantages resulting from sea-sickness are positive and negative. Sometimes the agonizing efforts to relieve the stomach occasion, as remarked before, a hæmatemesis, and fatal results have occurred in advanced pregnancy. Moderately, however, sea-sickness acts beneficially by exciting the liver to more vigorous action, and by causing the stomach to eject surplus bile. More than that, it eventually tones the appetite and leaves the bowels in a good condition by the increased peristaltic movement imparted. As Dr. Chapman, I think, was accustomed to say, "It shakes up the gall bladder, and clears the ship fore and aft."

I hope my remarks as regards this theory of perverted vision may not appear egotistical, nor do I plead guilty to the charge of hypercriticism. My remarks are based on the teachings of the great master—experience.

CLINICAL PAPERS ON EAR DISEASE.

By D. B. St. JOHN ROOSA, M.D.,

PROFESSOR IN THE UNIVERSITY MEDICAL COLLEGE.

NO. I.—INSPISSATED CERUMEN.

It is intended, in the papers which are proposed under the above title, to present some of the practical results of an experience in ear diseases, reaching over quite a large number of cases, in such a way that they may be useful as a guide to those who see comparatively little of the diseases of this organ.

Among the laity, and even in the profession, hardening of the ear-wax is regarded as quite a common and harmless affection. All forms of deafness are ascribed to this cause, and the first treatment that many ear patients receive, is a vigorous syringing, to see "if the wax be not hardened," and this often without any preliminary examination. Impacted cerumen is indeed quite a common occurrence, but it is by no means as simple an affair as has been generally supposed. I do not mean by this, that it is anything more, as a general thing, than a local affection, but as such, it may produce results very detrimental to the function of hearing. It hardly seems to occur more frequently in persons with a soft skin than others, as has been suggested by some authors, for among the patients whom I have seen, careful examination has failed to detect any such origin. Persons with a dry and harsh skin have as often come to me with impacted cerumen, as the opposite class. A frequent cause is the too careful washing of the auditory canals with soap and water, which some over-clean persons delight in doing. This rinsing out the canal plugs the natural yellow wax, which is on its way out, down to the bottom of the canal, and being continued morning after morning, at last fills up the ear, and when the drum is once fairly covered, and pressed upon, and *not till then*, deafness results. It is somewhat remarkable how long persons may have the ears plugged up with hard wax without being aware of it. On examining patients who present themselves with impacted wax, only causing deafness on one side, we will nearly always find the same condition of things as to the wax, in the other ear. If the cerumen be very black and hard, and if it comes out in one large plug, we may conclude that it has been there for years. I recall two cases in which, from definite accounts, we could safely conclude that five years had elapsed since the deafness occurred. In both of these cases the hearing became normal after the wax was removed. Impacted wax sometimes causes serious inflammation of the canal and drum. In one case, that of a young lady, suppuration of the drum resulted from hardened wax pressing upon it, and the wax was removed spontaneously like a shot from a pistol, and, as was stated, with almost as loud a report. This evacuation was preceded by the most intense pain. The removal of a plug three-fourths of an inch long from the other auditory canal, and which was wedged in very tightly, saved the patient from the inflammation which was so troublesome on the other side. In another case still under treatment, what was supposed to be on first examination a plain case of inspissated cerumen, was found, after removal of the wax, to be one of inflammation of the integument which lines the canal. The removal of the hardened wax was, as it were, only the removal of a huge scab from an ulcerating surface. I have seen other cases like this.

Inspissated cerumen causes many symptoms. The prominent ones are:—

1. Sudden deafness.
2. Tinnitus aurium.
3. Vertigo.
4. Earache.

Of course an examination is the only method of clearing up the diagnosis. This examination should be undertaken with the ear mirror (or otoscope, properly called), and not with the syringe. In other words, it should be ocular and not tactile. The trouble can hardly be confounded with any other affection. Wax which presses upon the drum is almost always black, not yellow, and nearly fills the canal. No decided prognosis can be given from seeing the wax, as to whether its removal will restore the hearing. Hardened cerumen very often forms over a perforated or ulcerated membrana tympani, and is then of course only a small part of the disease. It often results also from the dropping of oils into the ear for some therapeutical end seldom attained. The original disease for which the oils were used was then probably an affection of the cavity of the tympanum.

The habit of examining the ear in all cases with head symptoms, will sometimes assist materially in clearing up a diagnosis. I once cured a man from the effects of a supposed sun-stroke, by removing inspissated cerumen, who had been treated for two months in a hospital for cerebral disease.

Patients who have once had impacted wax, are apt to suffer again from the same cause, at least I have seen quite a large proportion of cases in persons who have been affected in the same way before. Such may be advised to have their ears syringed with a solution of bicarbonate of soda and water, about once in two months. The removal of the hardened mass is very often a tedious affair. I once spent an hour a day for a week in removing a mass from the ear of a lady patient. In the interim the best solvents, such as soda, were used. With previous soaking the canal with a warm solution of soda, say a drachm to the half pint, ten minutes will generally suffice to remove the mass. A good india-rubber syringe, holding at least four ounces, should be used, and the auditory canal well straightened by holding up the auricle with the left hand, at the same time syringing with the right. The glass syringes are of no use. The stream sent in should be vigorous but steady, and care taken not to inject it with such force as to cause pain or dizziness. There should never be any pain caused in syringing the ear for any purpose. Where pain is produced, syringing will do harm. A thin bowl is held under the ear by the patient. No assistant is needed.

No towel need be placed on the patient's neck, for with careful manipulation no water will be spilled.

The ear may contain an astonishingly great quantity of hardened ear wax, and an examination should be made very frequently during the course of the syringing to determine when it is all removed. No after-treatment is necessary. If, however, sounds are oppressive, as they often are, after the removal of large quantities of ear wax, a little cotton may be worn in the meatus for a day or two. The membrana tympani always appears reddened immediately after the removal of the cerumen, and then dull. It will be some days before it regains its normal translucency. If the hearing be not improved immediately on removing the wax, the middle ear should be inflated by Politzer's method. The drum is sometimes sunken in temporarily, and one or two passages of air through the eustachian tube will restore its position as well as the hearing.

Professor Gross recommends the use of a pick for the removal of impacted wax. This does very well as an aid where the wax is very hard. If it be used, the surgeon should have a mirror on his forehead, and never put the pick in the canal, unless he can see just what he is doing. Painful and even destructive inflammation may be caused by this mining out process. The general practitioner, to whom ear cases come in only a small proportion in his daily rounds, had much better rely on the use of a syringe and warm water where possible, having previously moistened the canal with a warmed solution of soda, zinc. sulph., or with glycerine and water, sweet oil, etc. Inspissated cerumen rarely occurs in children. I suppose there is no difference in the liability of the sexes, and I know of no well-established proximate cause, except the one given in the beginning of this article, *i.e.*, packing the meatus by the frequent pouring in of water. Yet we might say that it is common for hardened wax to collect about a foreign body in the ear, such as a raisin, introduced originally to relieve earache, a cherry-pit, etc., but here the inspissated cerumen is only a concomitant. It is hardly to be credited, although formerly generally believed, that a diathesis has anything to do with it, or that there is any disease of the ceruminous glands. The cause is probably in one way or another mechanical—that is, there is some interference with the normal and daily removal of the secretion.

HERPES CIRCINATUS AND FAVUS FROM ACHORION IN THE MOUSE.

By R. CRESSON STILES, M.D.

Two specimens have accidentally fallen under my observation, within a few years, of mice infected with a vegetable parasite which had destroyed the scalp, blinded the eyes, and covered the head with whitish friable masses of fungus. Such specimens (similar at least in general appearance) I find, on inquiry, are not rare.

Under the microscope the fungus in question presents the characters of Achorion Schœnleini; its elements are merely smaller, or less luxuriant than those taken from a crust of favus on the human scalp.

Recently I inoculated a spot on my forearm, as in vaccination, with a fragment of the favus-crust of a mouse, and in ten days, when I had supposed the inoculation a failure, a ring of herpes circinatus made its appearance, of a quarter of an inch in diameter, around the point of inoculation. The ring of vesicles continued to enlarge until it reached an inch in diameter, the enclosed area regaining the natural appearance of the skin. Under the microscope, however, its epidermic scales were found increased in size; many of them containing a formidable nucleus and nucleolus as in chronic eczema.

Attached to the scales of epidermis were spore-bearing filaments and spores, the latter rapidly multiplying by gemmation. The circle of vesicles was composed of minute acuminated elevations of the cuticle, filled with a clear lymph containing cytoid corpuscles only. At their base were found filaments of mycelium, but no spores. The vesicles are, without doubt, produced by the irritation of these filaments as they extend in the (so-called) rete mucosum.

A single application of an emulsion of the strongest carbolic acid (from deliquescent crystals), with an equal quantity of water, caused the whole disk to come off in a single scale or crust, in about a week, and the disease did not reappear.

Finding the results of this inoculation so readily controlled, I repeated the experiment on two of my medical friends, who were sufficiently interested in the matter to be willing to lend themselves to its further investigation. In both the period of incubation was ten days. On one no herpes appeared, but instead, the hair follicles became the seat of porrigo favosa. On the other, herpes circinatus first appeared; but after the herpetic ring had reached an inch in diameter, pits of porrigo favosa occupied its area, a hair passing through the centre of each. The whole area was elevated, congested, and its epidermis abounded in the filaments and spores of the parasite.

The results of this last inoculation gradually disappeared under the frequent application of carbolic acid.

In connection with the pathology of favus, the researches of Schœnlein, Gruby, Remak, Lebert, Bennett, Bazin, and Robin possess an interest inseparable from successful endeavors to trace the mode of action of a palpable, material cause in the production of a disease, the nature of which had long been the subject of surmises and theories only. In experiments on the inoculation of the achorion from favus in man, favus only, as far as I am aware, has been produced; and it has not been suspected that herpes circinatus and porrigo favosa were but different modes of growth and activity of the same living germs. Yet favus has often been seen to follow herpes, and the coincidence of the two diseases in the same person is quite common.

Recently Tilbury Fox has published an account of experiments on the production of herpes circinatus from favus in the cat. The source of favus in the cat is most probably the same disease in the mouse. The pulverulent crust of favus in the mouse scatters its fragments on the slightest touch, and articles of clothing are thus liable to the infection, and readily transmit it to man.

The value of carbolic acid in destroying a parasite so tenacious of vitality, is an indication of the importance of this agent as a parasiticide and disinfectant.

DELIRIUM TREMENS SUCCESSFULLY TREATED WITH COFFEE.

By WM. R. WHITEHEAD, M.D.,

NEW YORK.

Recently, in a case of delirium tremens, I observed a peculiarly marked tranquillizing effect caused by strong coffee, and which produced prolonged and refreshing sleep, after the usual remedies had proved ineffectual.

Mr. C., a merchant, visiting New York on business, who had been drinking very hard for several days, was taken with delirium tremens on the 13th of last March. His friends stated that they believed this to be his first attack. He was seen by a physician on the 15th, but did

not receive further medical attention until the night of the 17th, when I was called to see him. He exhibited the usual symptoms, with the exception of a remarkable absence of muscular twitching on feeling the pulse. His hallucinations were at times very amusing; he was not disposed to be violent, but was quite tractable and easily controlled by his attendants. A mixture, containing about a drachm of chloroform to the dose, was prescribed to be taken every few hours.

The next morning he was more quiet, having slept about two hours during the night, and for the first time since his illness. The condition of his bowels, his urinary and other secretions, were carefully observed. His tongue was large, white, and moist. Some pills of opium were substituted for a mixture containing chloroform and tincture of hops, ordered early in the day. A small quantity of ale was permitted, and some beef-tea and chicken-broth ordered. At night he was very restless; his pulse at one time could not be felt; his extremities became cold and respiration labored:—I gave him half a glass of whiskey.

On the morning of the 19th I was told that he slept an hour or two soon after drinking the whiskey; his skin was jaundiced, and he was costive. Twelve grains of blue mass were prescribed, which failed to produce the desired effect. At night eight grains of calomel were given, to be followed in the morning by a clyster. He vomited several times during the day, but retained the nourishment which he had taken.

On the 20th his bowels were slightly relieved, his skin was moist, and pulse good. I prescribed sulphate of morphia in half-grain doses; he became quite restless during the day.

The next day there was no sensible abatement of the restlessness, and he was not free for any length of time from ludicrous or disquieting hallucinations. At no time, however, was he violent, nor did he manifest great fright. The sulphate of morphia was repeated; he took some nourishment; his bowels were moved with a clyster. Complaining of soreness in the stomach; a blister was placed on the epigastrium.

On the 22d, at the morning visit, being satisfied that the morphia had failed to afford relief; bromide of potassium was given, twenty grains at a dose, every two hours, in a suitable mixture. At the third dose he became more restless and excited than he had previously been. The bromide was discontinued, and three subcutaneous injections of Magendie's solution of morphia were made, of thirty drops each, at an interval of one hour between each injection. They failed to produce the slightest apparent effect. He drank half a glass of whiskey, which seemed to quiet him considerably. He took frequently during the day Tourtelot's beef-essence with much relish.

On the morning of the 23d I was told that after drinking the whiskey he slept three hours, but I found him quite restless. Bromide of potassium was prescribed in drachm doses, of which he took two, each at an interval of two hours. At half-past four P.M., he was much more quiet. He asked for a cup of coffee, which he drank very gratefully, and at the same time eat a small piece of bread. Ninety grains of bromide of potassium were ordered at a dose, in which doses I was reliable informed it had been recently given successfully in delirium tremens at the New York hospital:—During the night two doses of the bromide were administered. His urine was abundant and clear; pulse strong and full. He slept about an hour that night. The next day his bowels were slightly moved with a clyster. The bromide of potassium was repeated twice, in doses of ninety grains, and produced at the second dose some anæsthesia of the skin.

On the 25th Professor Willard Parker saw him with me, and observed the same absence of muscular twitching to which I have already alluded. It was decided that the patient should have his body and limbs well rubbed after being washed; that he should be permitted to have a cup of coffee, and as much nourishment as he could be induced to take. At night a hot whiskey toddy was to be given to him, to be succeeded by inhalations of ether, but the ether was not given.

At the morning visit the next day I found that he had not slept during the night, and was very restless. The toddy seemed at first, as his nurse informed me, to make him more quiet; but he soon became much more restless after than before taking it. Chloroform, opium, brandy, and bromide of potassium had been each unsuccessfully essayed; the last of these substances in such doses as thoroughly to test its action. One prominent idea, however, governed my course throughout the treatment—it was properly to nourish the patient. I regarded the alcohol as a poison to be eliminated, but considered that the equilibrium of the nervous system should be gradually reëstablished by suitable stimulants. Only temporary benefit resulted from the remedies used; and if at times they failed to produce any appreciable good, they, on the contrary, once or twice seemed to be productive of harm. When quiet, and sleep did not immediately follow the use of brandy, the restlessness was much increased. Morphia appeared to be positively injurious. The bromide of potassium, in doses of twenty grains, greatly excited the patient; increased to drachm doses, and then to doses of one drach and a half each, made him a little more quiet. I was not encouraged, however, to continue any longer these remedies, but disposed to discontinue further medical treatment, and rely upon the gradual assimilation of concentrated and nutritious food, to allay the nervous excitement, and produce sufficient recuperative sleep.

The patient had several days before expressed a wish for coffee, which he seemed to relish. It now occurred to me that coffee, acting as a food, containing nitrogenous principles, and also as a special nervous stimulant, might in this case, by its peculiar action, if given in sufficient quantities, produce a quieting effect and induce sleep. Consequently coffee was tried; and the issue of the experiment proved to be successful.

At two o'clock P.M. about a pint of very strong coffee was prescribed, with a little cream, enough to make it palatable for him; and a broiled steak ordered, a part of which he eat. At eight o'clock P.M. I found that he had slept four hours. He drank again a large cup of coffee, and took fifteen grains of blue mass.

On the 27th, at the morning visit, I found that he had slept nearly all night, but was then restless. His bowels had been moved, and his general condition was very much improved. Very strong coffee was again prescribed, and at half-past twelve o'clock P.M. I found him asleep. After this the coffee was repeated a few times; he continued to improve, and soonrecovered.

Probably this nervous stimulant, by imparting an increased tone of a peculiar character, to the general system, reëstablished its equilibrium and caused sleep, when other stimulants, acting in a different manner, failed to produce this result. This, however, is merely a conjecture, and may possibly be explained by others in a more satisfactory manner.

28 Fifth Avenue, New York.

Creosote for Burns.—A correspondent highly extols creosote as an external anodyne for burns.

Reports of Hospitals.

JEFFERSON MEDICAL COLLEGE,

OF PHILADELPHIA.

SURGICAL CLINICS OF PROF. GROSS.

CATARACT.

OCT. 27, 1866.—Mrs. Catharine H——r, æt. 47. One eye of this patient was operated on a year ago, and there still remains in it a portion of the capsule of the crystalline lens, presenting a dense, white, chalky appearance, as observed through the dilated pupil. There is some amount of vision. In the other eye there is a cataract of the crystalline lens and its capsule, which has existed about eighteen months. The general health of the patient is good; she has no diabetes. Three of her brothers have gone blind with cataract.

Occasionally as many as five or six members of the same family suffer from the disease, showing that there is a hereditary or family proclivity to the affection, though this is, of course, uncommon.

Cataract is an opacity of the crystalline lens and its capsule, or of the crystalline lens alone, or of its capsule alone. It presents itself in various forms or degrees. When the opacity pervades the entire crystalline lens and its capsule, we say the cataract is complete or mature; it is imperfect when the reverse is the case,—when there is a portion of the crystalline lens, or of its capsule, or of both, in a state of transparency or partial transparency. Cataract is liable to occur at all periods of life; it is sometimes an intra-uterine affection, the disease taking place before birth, during gestation; or it may take place soon after birth; it is uncommon in children and in very young persons, being met with most frequently after the age of fifty, and from that on to sixty-five or seventy years. It generally comes on without any assignable cause, and is developed gradually, not suddenly; but there is occasionally an exception to the rule, as in a case which occurred to the speaker many years ago in the Louisville Hospital, where a man's eye became cataractous in the course of twenty-four hours.

The disease is liable to occur in both sexes, but is more common in males than in females, in all probability growing out of the usual difference of their daily employments. It is liable to occur in persons of all ranks and of all pursuits; it is said that persons who use the eye a great deal for minute vision are more liable to suffer from it than others, but it is not determined that this is the fact. It was formerly said that blacksmiths were exempt.

The disease is a painless one; the loss of sight is gradual, and, when there is no complication attending the case, there is still a certain degree of vision when the pupil is dilated, as in cloudy states of the weather, or in daylight when the pupil has been dilated with atropia, belladonna, stramonium, or some narcotic of this kind. Under these circumstances the rays of light pass between the margins of the iris and the retina so as to produce a certain amount of vision. When there is adherence to the margins of the iris, the rays cannot penetrate and the patient is completely blind.

The opacity of the cataract generally begins from the radius to the circumference. Simultaneously the opacity begins in the capsule and the lens, and begins usually in the posterior portion. When the opacity is in progress we can discern it very readily by looking through the pupil, especially if previously dilated, as a little speck of a whitish, or slightly yellowish, or drab-colored aspect. This enlarges, gradually increases, and when the cataract is complete there is no difficulty at all in regard to the diagnosis. Sometimes, but very reprehensibly, opacity of the cornea is mistaken for cataract, but this is the result of inflammation, and should be duly recognized. Cataract is an opaque body lying behind the pupil directly in the centre of the eye. When there are adhesions of the iris to the lens, or when the pupil has been diminished in consequence of inflammation, and opacity of the cornea coexists with these adhesions, then the diagnosis may be very difficult indeed. Under all circumstances the proper plan is to dilate the pupil by the application of atropia, the proximate principle or alkaloid of belladonna. From one-third to half a grain dissolved in half an ounce of water will be of sufficient strength for the purpose, and a few drops of this solution put in contact with the cornea and conjunctiva will dilate the pupil. The head should be thrown back, the eyelid opened to expose fully the surface of the ball of the eye, and then five or six drops of the solution should be put in contact with the organ, and if the process be repeated several times in the twenty-four hours, free dilatation will be the result, which will continue for several consecutive days. It dilates the pupil to the very utmost, paralyzing it for the time being. Instead of dropping the solution into the eye, it may be applied by rubbing the solution on the eyelids and eyebrow. We no longer use the belladonna as formerly, the atropia being more reliable, prompt, and efficacious.

When the pupil has been dilated we look at the cataract, and the diagnosis is sufficiently plain.

There are different operations in vogue for the removal of cataract. When the cataract is soft, when the disease is of recent standing, or occurs in a very young person, the operation adapted to its relief is comminution by means of the needle, or a very delicate knife introduced into its substance, passing the instrument about in different directions and breaking up the lens and its capsule, hashing it as it were, and subjecting the fragments to the action of the aqueous humor of the eye, or the absorbents of the eye, if you please, for it is a disputed point if the aqueous humor, weighing only five grains—a few drops of liquid—has any solvent powers or not. All we know is that when the cataract is carefully broken up in this way, and the resulting inflammation is properly kept in check, solution takes place, the fragments gradually disappear, leaving the aqueous humor perfectly clear and limpid for the transmission of the rays of light.

A soft cataract is usually distinguished by its large size and peculiar whitish or bluish appearance.

When the cataract occurs in a person of advanced life, is of long standing, comparatively small, of a yellowish or drab-colored appearance, then we assume that it is hard, and that the operation of comminution is not adapted to it, for we cannot break it up with a needle or comparatively sharp knife. It must be extracted.

Formerly, indeed until within the last few years, an operation called *depression* or *couching* was very much in vogue. This operation consists simply in introducing a delicate needle into the eye, and displacing the cataract or opaque body by throwing it out of the axis of vision and burying it in the vitreous humor of the eye, depressing, couching it, or laying it down as it were. This operation has become obsolete, and very justly so, because it has been found from long experience that this opaque body, the crystalline lens with its capsule, will remain here for years undissolved, unaffected by the vitreous humor of the eye; not only this, but it will dissolve the vitreous humor of the eye itself, by its pressure, by the inflammation which it produces; and it will gradually sink down to the lower part of the eye so as

to press upon the retina, and in this manner produce an amount of inflammation which will be rapidly followed by an irretrievable loss of sight.

There is another operation in connection with soft cataract, consisting in lineal extraction, devised by Gibson, of England, in 1811, subsequently modified by some German surgeons and revived afterwards in England. It consists in making a small incision, not more than about two and a half lines in extent, that is about one-fifth or one-sixth of an inch, through the lower part of the cornea, and then scooping out the lens along with its capsule. This is called linear extraction, because of the delicacy of the incision. It is adapted only to soft cataract, not to hard. The old operation consists in making a large free incision into the cornea, either in the upper or lower portion of its extent as the case may be, the lower incision being usually preferred, and very justly so. The incision includes fully one-half of the circumference of the cornea. It is done with a delicate knife, and the next step consists in lacerating the capsule of the lens; inthe next place pressing out or hooking out the opaque body, the crystalline lens. This is called the operation of extraction, and when properly performed affords vision at once. The patient has to run the risk attendant on the resulting inflammation, which may be so great as to prevent union of the wound in the cornea, and lead to gangrene or sloughing or destruction of the eye, as has happened in thousands of instances. It is adapted only to cases of hard cataract, and the eye should be rather prominent than otherwise; if it is sunken back in its socket it is not as favorable for extraction; nor is it well adapted where there is unusual flatness of the cornea, which should be convex, prominent, in order to justify this kind of interference; still, this is not an insuperable objection. Then there should be a perfect formation of the pupil; it should be dilatable, not necessarily dilated; there should be no adhesions at all, no disease in the iris—otherwise the case is not adapted for extraction.

The operation proposed to be performed in the present instance consists in lacerating the capsule, and those portions of the lens which can be brought under the influence of the needle. The cataract appears to be a soft one, or very nearly soft, though there may be a little nucleus in the centre. The operation is easy, the manipulations simple, and it is not painful. It is not necessary to administer chloroform, as is done when the operation of extraction is performed, when we want perfect control over the eye as well as over the body. The patient may sit up or lie down, as is most convenient, though it is preferable that the patient sit up, with the head reclining against the breast of an assistant. The upper eyelid should be held out of the way by the index-finger of the assistant, the lid being caught between the soft portion and the nail; the lower lid is depressed by the index-finger of the surgeon; then the delicate needle, held in the other hand as a writing-pen, is introduced and the cataract comminuted.

SEBACEOUS TUMOR OF NECK AND SHOULDER.

Oct. 27, 1866.—Lizzie R——o, æt. 22. This patient had a tumor of fourteen or fifteen years' standing upon the back part of the neck and shoulder. The skin was not particularly discolored, being but a shade or two more red than the parts around, owing to the pressure of the tumor on the skin and the consequent congestion of the vessels in that part. It was movable and painless.

There are various tumors liable to form in this situation; some formed from preëxisting tissues, others not. We have the fibroid tumor, a structure composed of fibres crossing each other in every direction, and imparting a firmness to the tumor unlike that found in any other portion of the body except cartilage, tendon, and bone; a tumor liable to become developed in many portions of the body, more particularly the uterus. In the case before us, the tumor is comparatively soft, therefore we exclude from our diagnosis the idea that it is one of those class of tumors fibroid or fibrous in character. In the next place, is it a cartilaginous, or fibro-cartilaginous, or bony tumor? Of course if it is too soft to be fibrous, it cannot be any of these. It is not a wen-like excrescence, as occasionally occurs in various parts of the body, especially the head and the face; so we exclude that from our diagnosis. It is not a nerve tumor or a neuroma, because it is free from pain and it is situated very superficially; besides, it is much larger than a nerve tumor would be in this situation. The nerve tumor occasionally acquires a large bulk, the size of a man's head, when it occurs in connection with the large nervous trunks. It is not a cystic or an encysted tumor; it is not as distinctly elastic as if it contained a watery or sanguinolent fluid. It is not a hydatid tumor, for it is exceedingly uncommon to find such a tumor under the skin, and then it is remarkably elastic, fluctuating distinctly under pressure. This tumor has a semi-elastic feeling, bordering on the doughy, difficult to describe.

Insertion of an exploring needle, however, demonstrated that this tumor was sebaceous or encysted. It was larger than the sebaceous tumor is usually found, and it is rare that a sebaceous tumor is found in this situation; hence the liability to a mistake in diagnosis.

On removal, the cyst of the tumor was much shrunken, its contents resembling spoiled tallow or lard.

This is therefore a tumor which had its origin in a pre-existing tissue, and is not a new formation, having been developed from a sebaceous gland, follicle, or crypt. The inspissated secretion which becomes pent up does not remain an innoxious fluid, but from long retention may become excessively offensive in consequence of the presence of a large quantity of sebaceous acid. Sometimes we find it partly fluid and partly solid; now and then cases occur in which hairs are found among the contents, especially in the congenital form of the sebaceous tumor, such as developed under the eyebrow, eyelid, forehead, and various portions of the scalp. They are frequently seen with numerous hairs in the interior of the cyst, evidently retained during the progress of development.

The cyst is nothing but the wall of the sebaceous crypt or follicle in a state of hypertrophy in consequence of long-continued interstitial deposits; retention of the fluid produces irritation, provokes a flux of blood and nerve fluid to the part, and thus the wall of the crypt becomes greatly enlarged, and in some cases, when the tumor is very old, a portion of the cyst degenerates into fibro-cartilage, or into cartilage, and occasionally, though very rarely, into bony substance. Thus this tumor is simply an unnatural development of a preëxisting structure, frequently so small it cannot be perceived by the naked eye, but capable, during the progress of its development, of assuming the volume of a hen's egg or an orange. This tumor does not take on malignant action, but in consequence of long-continued pressure, or the pressure of the dress on any part of the body where the tumor may exist, ulceration is liable to take place, and then a very unpleasant sore may be produced, causing pain, and being the seat of a constantly offensive or fetid discharge.

The only remedy is excision, and every particle of the cyst must be removed; if the slightest atom is left behind, it becomes the nucleus of a new formation.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

CALLED MEETING, SEPTEMBER 18, 1867.

DR. ALFRED C. POST, President, in the Chair.

THE QUESTION OF AID FOR THE YELLOW-FEVER SUFFERERS AT THE SOUTH.

DR. CHAMBERLAIN, in explanation of the objects of the meeting, read the following:

301 MOTT STREET,
NEW YORK, Sept. 14, 1867.

SIR: At a meeting of the Executive Committee appointed at a general meeting of citizens held on Friday, the 13th inst., to devise means for administering to the wants of the sufferers from yellow-fever, it was

Resolved, That, in the judgment of this Committee, it is desirable that the subject of ways and means to aid the sufferers from yellow-fever in the Southern cities should be taken into special consideration by the New York Academy of Medicine, the Kings County Medical Society, and other similar associations: and inasmuch as hundreds who now need our charitable relief daily become victims of this terrible scourge, prompt action is necessary.

Very respectfully, your obedient servant,
JOHN BROWNE, Secretary.

A. C. POST, M.D., President of the New York Academy of Medicine.

DR. HAMILTON, after adverting briefly to the destitution of the South, and the urgent want of experienced nurses, gave it as his opinion that the epidemic would spread, and that its final arrest could not be expected before the accession of frost, which in the Gulf States occurs about the middle or latter part of October. He said the medical profession, through its various organizations, was capable of wielding a power which had not yet been exerted, and which might well be put forth in a cause like this. It was not expected that members of the Academy would contribute largely, because in many instances they were not able to do so; but they could do much towards arousing a public feeling that would carry material aid to the sufferers. He then moved the following, which were unanimously adopted:

Resolved, That the President of the Academy, Dr. ALFRED C. POST, with the Council of the Academy, constitute a Medical Relief Committee, who shall be authorized to receive and distribute such funds as may, for the purposes specified, be handed to them, and that they be authorized also to adopt such further measures for the relief of the sick at the South as they shall deem proper and fit.

Resolved, That we recommend to all American medical organizations, especially in the States not suffering from the present epidemic, to take similar action as speedily as possible. The President and Council of this Academy will take charge of such funds as may be forwarded from other medical societies; or they may send their contributions direct to the President of the Howard Association at New Orleans, which Association will distribute the same to other branches in other cities in such manner as may be required.

THE PERILS AND THE DEVOTION OF THE ARMY MEDICAL STAFF.

DR. CHAMBERLAIN read a letter from Dr. E. Harris, calling attention to the devotion of the army surgeons in the South, many of whom have died at their posts during the prevailing pestilence, and offered the following resolutions, which were adopted unanimously:

Resolved, That this Academy sends its greeting of sympathy and cheer to our professional brethren of the fever-stricken South; that it recognizes with admiration their heroic and unselfish devotion to the profession and humanity; that in the swelling list of those who have not feared to die, and in the unfaltering ranks of those who live to labor in this good cause, the profession and the world are again called to witness that the true physician braves peril and gives his life whenever necessary in ministering to the sick.

Resolved, That we endorse and respond to their call for all personal and material aid needed for the most complete medical care of the sick.

The Academy then adjourned.

EAST RIVER MEDICAL ASSOCIATION.

STATED MEETING, AUGUST 6, 1867.

DR. VERRANUS MORSE, PRESIDENT, in the Chair.

AMENDMENTS OF THE CONSTITUTION AND BY-LAWS.

DR. WEISSE proposed several amendments to the Constitution and By-Laws, the chief of which related to the division of the organization into sections. These were as follows: Surgical Anatomy, Pathology, and Practice, F. D. Weisse, *Chairman*; Visceral Anatomy, Physiology, Pathology, and the Practice of Medicine, Alexander W. Stein, *Chairman*; Obstetrics and Gynæcology, M. S. Buttles, *Chairman*; Therapeutics and Medical Jurisprudence, Truman Nichols, *Chairman*; Hygiene, Climatology, Meteorology, and Vital Statistics, William F. Thoms, *Chairman*.

DECEASED MEMBERS.

DR. THOMS announced the decease of Drs. Philip O'Reilly and Edward Kelly Hogan. The following committee, at the conclusion of eulogistic remarks by several members of the Association, were appointed to draft resolutions expressive of the sense of the meeting:—Drs. W. F. Thoms, John Burke, and John Purcell; and Drs. Henry E. McCartin, E. J. Hogan, and James J. Purcell. On motion, the following were appointed a special committee on visitation of sick members:—Drs. William Newman, Truman Nichols, John Burke, Richard J. O'Sullivan, and Henry E. Crampton.

THE PRESENT STATE OF KNOWLEDGE REGARDING ZYMOTIC DISEASES.

DR. SKIFF, in a paper which he had prepared, briefly reviewed the substantial advances made in our understanding those diseases which nosologists had classed under the head of *zymotic*.

He maintained that zymotic disease depended for its cause on either *virus*, *miasm*, or *venom*, the first-mentioned of which would constitute the agent for the transmission of contagious diseases, *e.g.*, variola, which by virtue of the impalpable miasm diffused through the air or inherent in the fomites, was also an infectious malady. Miasm, or the second morbific principle, is that unknown, inappreciable emanation, exposure to which produces a specific disease. To illustrate, the same miasm will not produce, in different individuals, typhus fever, yellow-fever, and cholera. Venom differs from both virus and miasm; it is a physiological secretion found in the so-called venomous insects and reptiles.

He then alluded to the so-called infantile diseases,

which claimed so large a share of the attention of humanitarians and medical philosophers.

After commenting upon ventilation and cleanliness as being the most positive of prophylactics, he passed to the consideration of disinfectants, which for convenience of study were classed under three heads:

1. Chemical disinfectants.
2. Absorbents.
3. Antiseptics.

In the employment of all the practical applications of our art, we must as nearly as may be, conform to the sanitary processes of nature, whose principal hygienic operations were mainly oxidation, diffusion, and dilution. All these we may imitate, but only to a limited extent.

Keeping in mind that all other means are but subsidiary to thorough ventilation and removal of organic matters, the most effectual method of purifying the air and destroying the virus or infection of disease is by the evolution of certain gases, such as ozone, chlorine, hyponitrous, nitrous, and sulphurous.

Ozone may be liberated by placing a stick of phosphorus on an ordinary tea-plate, with sufficient water poured upon it to immerse two-thirds or three-fourths of it, according to the size or the volumetric capacity of currents of air circulating through the room. The evolution of this agent may be instantly suspended by covering the phosphorus entirely with water.

The next article in importance in point of practical efficiency is

Chlorine, which is less objectionable than the preceding, from the fact that there is less danger of mismanagement. The liberation of the gas is more gradual and more controllable. The formula used in the U. S. army hospitals is an excellent one, and is as follows:

18 parts common salt, finely ground,
15 " binoxide manganese, finely pulverized.

Mix, and place in a flask, and pour on it the following mixture, completely cooled:

45 parts of concentrated sulphuric acid,
21 " water. Shake the flask.

Bromine is very efficient; it evaporates spontaneously when the bottle containing it is uncorked, and soon deodorizes the infected room. But being difficult to manage, and expensive, it is less used than others.

Nitrous acid acts very powerfully on organic matters, but being very irritating to the respiratory organs, it it should only be used in the chamber after vacation by the patient, which of course is not always practicable. It may be evolved by placing nitrate of potash in sulphuric acid, or by placing a bit of copper in nitric acid, diluted with water.

Sulphurous acid, readily obtained by burning sulphur, acts very powerfully on organic matter by oxidation, especially destroying animal contagion and miasms, but is also irrespirable, except in limited quantities.

The agents just mentioned are deodorizants, and antiseptic as well as true disinfectants, by virtue of their oxidizing properties.

Absorbents.—The most available, as well as the most economical, of the second class of disinfectants is charcoal.

This may be used very efficiently in covering over the surface of the contents of a privy-sink or cesspool; or it may be very beneficially mixed with lime unslaked —in the proportions of one of charcoal to two of lime. These two agents more completely cover the whole ground in the matter of general disinfectants than any of the others.

In disinfecting old dwellings, as has already appeared in the instructions of the Health Board, the smoke of a wood fire is an ever-ready expedient. Dry lime sprinkled on moist or oleaginous surfaces has also repaid the experimenter with the most beneficial results.

Of the *antiseptics*, the metallic salts are the most useful as deodorants. Among these may be mentioned—

1. Solution of nitrate of lead (℥ j. salt to ℥ j. water).
2. Solution of the chloride of zinc.
3. Solution of the sulphate of copper.
4. The salts of iron—the protosulphate and the protochloride. The salts of iron are very prompt in controlling ammoniacal, sulphuretted, and other noxious effluvia; hence very useful and convenient in deodorizing evacuations by vomiting or by stool.
5. Permanganate of potassa—one of the most useful and efficient of the class, has but one drawback, to wit, expensiveness.

It is particularly efficacious in topical applications, in dressing wounds, old ulcers, and the like. To purify infected apartments, cloths saturated in a strong solution of the permanganate may be suspended.

Another very useful purpose for which a solution of the permanganate may be employed, is the purification of water. Drop small quantities into the water until the beautiful tinge of the permanganate begins to appear. Shake well, and deodorization immediately takes place, and water which otherwise would be very offensive from decaying animal or vegetable matters, may become wholesome, tasteless, and drinkable, and the effect of the necessary amount of permanganate is to render the water tonic in its effects, and not in the least objectionable.

5. Carbolates.—Creosote, carbolic acid, and coal-tar are each very effective as antiseptics, and not only arrest the putrefactive process, but as long as it is in the pabulum subject to change, it prevents the recurrence of putrefaction. But owing to the fact that they are easily decomposed through chemical reactions, their effects are somewhat limited.

Their offensive smell renders them objectionable to some extent in dwellings, but they are very valuable in disinfecting sewers, drains, privies, stables, and the like. Coal-tar may be used for chamber vessels by mixing equal parts of coal-tar, alcohol, and soft-soap—a small quantity only is required.

Heat.—For the purpose of disinfecting clothing, merchandise, or fomites of any kind, a temperature of 250° may be employed with entire success, without any danger of injuring the color or the value of the finest textures. Rooms or ovens may thus be heated for the effectual disinfection of goods, clothing, etc., which have arrived at quarantine from an infected port.

But assuming as correct the theory that the so-called zymotic diseases owe their origin to a catalytic change in the blood set up by the introduction of an extraneous substance, the question most pertinent that now presents itself is—after the blood poison has entered the circulation, what are the *indications for treatment?*

1st. Neutralization of the poison; and 2d. Elimination.

Under the general expression neutralization, it is proper to mention, are included the different processes which may occur to put a period to the influence of the poison—whether it be by combining with the nervous element, and forming a compound on which the poison is incapable of producing an effect—as is supposed is the case in the result of giving arsenic and quinine in ague, or by the use of agents which will render the blood, or that part which is affected by the poison, unfermentable; or by the direct effect of oxidation by union of the poison with the remedy.

In the treatment of some forms of the contagious diseases, such as syphilis, gonorrhœa, puerperal fever, and erysipelas, the disease undoubtedly may be aborted by

burning out the virus previous to its extending from a local to a constitutional disease. In the case of puerperal fever or erysipelas, the nidus is so subtle that the initial point for abortive treatment must be carried back a step further, and the physician or nurse should thoroughly wash his hands, instruments, etc., in a solution of permanganate of potassa, creosote water, or some efficacious disinfectant.

In case of infectious diseases, if there be a class of remedies by oxidizing the poison or rendering unfermentable its pabulum, their general application would indeed be a forward step.

That there are such a class of remedies has been claimed by Dr. Giovanni Polli, in his often-quoted communications to the Royal Institute of Lombardy, at Milan.

Results so far seem to favor his theory, since *pyœmia septicœmia*, and all the class of fevers with putridity and purulent absorption, such as hospital fever, and puerperal fever, anatomical inoculation, etc., have been treated by the alkaline sulphites with advantage.

Miasmatic fevers are treated with the sulphite of magnesia with great efficacy.

Numerous reports are given of their value in the *exanthemata* and *typhus fever*.

The general results reported are to the effect that they mitigate the intensity of the febrile exanthem, render the confluent and malignant forms more benignant, shorten the course of the milder forms, and in all cases accelerate convalescence.

Dr. Polli does not state that they will prove available in curing cholera and plague, but thinks they will prove highly useful as prophylactics.

The plan of Dr. Polli has to recommend it that it is rational, and as the sulphites are innoxious in their effects, it is to be hoped that the profession in this country will give it a thorough trial.

It appears that in order to get the curative effect of these medicines, it is best to saturate the system. For rapid sa uration the sulphite is better than the hyposulphite.

Of the sulphite of soda, four or five drachms a day, dissolved in water, is the minimum dose. But for the prophylactic effect the hyposulphite is preferable.

Elimination.—In taking general ground as to whether or not the eliminative treatment is to be adopted in the treatment of zymotic disease, it cannot but be granted that the indication exists, if we accept the fact of the blood containing an extraneous poison.

It must certainly be conceded that throughout the whole class of zymotics there is running through each particular disease a similarity that links the whole together, exclusive of the similarity of the causes.

There is a prodromic, incubative period common to all, during which there comes on constitutional disturbance, which is fever. Then, after the acme of the disease has been reached, "when the leaven has leavened the whole lump," there is seemingly an effort of nature to cast out the *materies morbi* which has caused the disturbance. The increased activity in the exanthemata is exhibited in the skin; in plague in the glands. In typhoid fever the glands of the intestines are chiefly implicated, whilst in cholera and dysentery congestion of the abdominal viscera is present.

But because there is an indication that nature points towards the open door of any particular emunctory, it is not to say that all the treatment should tend to stimulate activity in that direction. On the contrary, in some instances it is eminently proper to make a diversion in favor of an already overburdened organ.

The paper concluded with remarks upon the therapeutics of cholera, in which it was maintained that opiates, alteratives, and astringents were really eliminative agents, which gradually directed the poison to the different emunctories.

The Association then adjourned.

Progress of Medical Science.

THE SURGERY OF THE ARTERIES has been signally stamped by the progressive conservatism of the day—thus far testimony inclines against the knife. Of 17 published cases of aneurisms and wounds of arteries, 8 were treated by ligature, of whom 6 recovered and 2 died; 9 were treated by compression direct or digital, and indirect or by tourniquet—*all* recovered.—*Med. Record* (*May* 1.); *Lancet*, i. 1; i. 9.; *Med. Times & Gazette, Mch.* 30, *p.* 335; *Am. Journal Med. Sciences*, vci., *pp.* 402–500; *Ann. Univers*, cxcix, *p.* 351. *Brit. Med. Journal, Mch.* 16; *Lancet* i. 4; *Gaz. des Hôp., Nos.* 25, 36; *Petersburg Med. Ztesch., vol.* xii, *No.* 213, *p.* 137.

THE THERAPEUTICAL ADVANTAGE OF POSITION IN THE TREATMENT OF SHOCK.—The following case is presented in the *Chicago Medical Journal*, by Hiram Wanzer, M.D.: March 16th, J. T., æt. 9 years, had fallen through a hatchway, alighting upon his head, and was taken home in a state of profound insensibility. There was scarcely any pulse when I arrived, and the heart's action was nearly suspended; there was general pallor of the countenance and coldness of the extremities, every symptom indicating early dissolution. I immediately raised the body and legs to an angle of 45°, and in less than 15 minutes, quite a full pulse returned at the wrist; the action of the heart was stronger, and the glow returned to the cheeks, showing that the capillary circulation was being established. He was now placed in the recumbent posture to remove his clothing and examine his body for injuries, and in a moment the blood forsook the wrist, and the heart's action was again more imperceptible. I thought he was gone. I placed him instantly in the former position, and in less than five minutes the pulse returned, and the heart began to beat with renewed vigor, and the brain responded to its acccustomed stimuli. The *rationale* of the treatment—the blood returned to the capillaries, and the machinery of life, temporarily suspended, was again set in motion. He remained in this position thirty minutes longer, when he was placed in the recumbent posture. Cold applications were applied to the head, and hot epithems to the feet, and an enema of whiskey, ʒ ss. with gum camphor gr. v. was given. This measure assisted in completing the reaction. His convalescence was exceedingly rapid, but he was speechless 24 hours.

HYPODERMIC INJECTIONS IN PUERPERAL CONVULSIONS.—Dr. V. H. Taliaferro in the *Atlanta Medical and Surgical Journal*, speaks in praise of hypodermic injections of morphia in a case of puerperal convulsions occurring in his practice. The convulsions had lasted several hours, and the head was well impacted in the inferior strait. On his arrival at the bedside, chloroform was immediately given, but did not control the convulsions until after she had been bled from the arm. Nearly three hours elapsed before the child was delivered with forceps. The patient was at this time in an "alarming condition from profound coma and great prostration." A grain of morphia was now administered by hypodermic injection, and the patient left until the following evening, when the operation was repeated. On the following morning the patient was but little improved. The injections were repeated as on the previous days,

morning and evening. On the third afternoon the morphia was discontinued, and the patient aroused, sat up in bed, and spoke to her attendants. From this time the recovery was rapid. Dr. Taliaferro thinks the "recovery of the woman mainly due to the hypodermic administration of the morphia, whereby a sufficient narcotism was induced immediately following delivery, and kept up until reaction had quietly and firmly established itself, avoiding thereby the violent reaction which would in all reasonable probability have ensued, and resulted in the most active inflammation, establishing itself, most likely, in the peritoneum, the uterus, or both."

Imperforate Anus in the Hog.—J. M. Johnson, M.D., relates, on the authority of Capt. McDaniel of Atlanta, Ga., a very curious circumstance, which can be verified by a number of witnesses. Mr. John E. Gadsey, of Franklin, Tenn., raised a male hog to be eighteen months old with imperforate anus. The animal was always fat, and in every particular, except the one mentioned, properly developed. After retaining his food for a certain length of time, feeding as other hogs, vomiting would ensue, and then, with an appetite as keen as ever, he would go to his meals again. He was killed at the age of eighteen months, was thoroughly fat, and to all appearances in perfect health.—*Atlanta Medical and Surgical Journal.*

Experience in the Treatment of Cholera.—In a communication to the *Cincinnati Lancet and Observer*, Dr. S. S. Todd, of Kansas City, advocates the use of cantharides in connection with dilute sulphuric acid. He says: "From a desire to have the plan thoroughly tested, I give my practice in a limited number of cases with the results:

"First, ten grains of mass hydrarg. and a large plaster of cer. cantharides, applied early over the stomach and bowels; to be removed before vesication if the symptoms abate. It is designed that the active principle of the fly shall be absorbed. Second, the following mixture: ℞. Tr. cantharid. ʒij., acid. sulph. dilut., syr. tolutani, *aa* ℥j., tr. opii ʒij. M. For an adult, two teaspoonfuls of the mixture in a wine-glassful of water every half hour or hour. If rejected by the stomach, *repeat at once* until retained. When the more alarming symptoms abate, administer more sparingly. This is intended for use prior to collapse, and as soon as diarrhœa or vomiting first occurs, and immediately following the mercurial. For collapse, the same, except that the tincture of opium is omitted, and the dose increased to three teaspoonfuls. One of the most remarkable and invariable effects is the immediate cessation of cramps, if they have been present. The pulse, too, is increased in fulness, and the heat of the body augmented. This is often seen temporarily in those who are beyond recovery. How far these results are due to the sulphuric acid, I am unable to say, as I have not used the cantharides except in conjunction with the remedies named. No alcoholic stimulant is allowed, and cold water is given by the teaspoon only. The extremities are kept warm with a dry heat. They should be kept well covered and no rubbing allowed. The patient should take the bed on the appearance of the first symptoms, and the most absolute quiet of the patient and surroundings should be preserved. If the case is dangerous, he should not even be allowed to turn over in bed, and should be prevented from getting up to have his evacuations, and urged to restrain them as long as possible. The first dose of the medicine is usually rejected, but if it is repeated immediately, it will be retained. Strangury is rare, and if produced, is easily removed by a dose of morphia. From the 13th of August, to the 1st of November, 1866, I had twenty-three cases under my exclusive care, and all of them were subjected to the foregoing treatment, with slight variations. In no case was the blister omitted, and all had the tincture of cantharides and dilute sulphuric acid in very nearly the proportions given. Of these 23 cases, 16 recovered and 7 died. Of the cases of recovery, 6 were of mild character, attended with vomiting or purging, or both; 7 were of a severer type, and partially collapsed, while 3 were completely collapsed. In none of the cases was there consecutive fever. Most of the cases were seen and treated early. In one case only had the disease existed over ten or twelve hours, and in this case complete collapse came on shortly after my first visit. This patient was able to leave his bed in five or six days. I do not hesitate to express the opinion that a majority of the fatal cases might have been saved by the medication described, had they been timely treated. Comparing this treatment with that I saw adopted in 1849–50, when calomel and opium were the remedies chiefly relied on, I am impressed with the belief that we are rapidly tending to the point when cholera shall be shorn of half its terrors."

Dr. Todd also calls attention to the use and probable value of the dilute sulphuric acid as a prophylactic in epidemic cholera. A fluid-drachm in a wine-glassful of water, before breakfast and before retiring at night, is sufficient. He and a large number of others have used it with complete satisfaction. Many of the parties were exposed for several consecutive days as nurses, and none of them took the disease.

Obstruction of the Bowels from Accumulation of Cotton Yarn.—Dr. C. T. Gardner reported (*Boston Med. and Surg. Jour.*) to the Providence Medical Association, a case of the above. The patient was a female, aged 26 years, a weaver by occupation. When Dr. Gardner first saw the patient, she had symptoms of enteritis, pains and tenderness of the abdomen, accompanied by vomiting. Bowels constipated, nights sleepless. In the emesis, he discovered a small quantity of cotton yarn. On inquiry, he learned that the patient, during the past six months, had been in the habit of chewing cotton yarn and swallowing it. To relieve the pain, he injected sulphate of morphia, hypodermically; this was followed by castor-oil, producing copious evacuations of the bowels, and revealing the cause of her illness, in the shape of some half-pound of cotton yarn. Dr. G. exhibited a portion of the yarn. The health of the patient previous to this illness had been good, the catamenia being regular; and she had no morbid propensities in relation to eating.

Puncture of Bladder per Rectum.—Recovery.—Dr. B. F. Hart, of Marietta, Ohio, in a private letter to a friend, reports a case of successful puncturing of a distended bladder, after all the ordinary means had been resorted to. The operation was performed per rectum by means of a trocar and canula. The cause of distension was an impassable stricture.

Ligature of Subclavian Artery.—The left subclavian artery was ligated, November 14, 1866, by Dr. T. G. Morton, Philadelphia, for spontaneous aneurism of the axillary. The patient recovered and was discharged on the 115th day, after having survived an unusual number of secondary complications, including twelve hæmorrhages from collateral vessels, which brought him three times to death's door, and, at last, sphacelation of nearly the whole arm. The ligature of the subclavian was placed upon its second portion, the wound healed perfectly, and the ligature came away on the eighteenth day.—*Am. Journal of Med. Sciences.*

Bromide of Potassium in Affections of the Testes.—Dr. Bedford Brown, of Washington, D. C., has, for ten years past, found the bromide of potassium very useful in diseases of the entire genito-urinary system, especially in affections of the ovary and testis. The earliest effect which he has noticed is a positive diminution of pain, and relief to annoying phenomena attendant. He thinks that this sedative power is displayed even in cases in which no more decidedly curative effect is produced. For the state thus induced he suggests the term *brominism.—Am. Jour. of Med. Sciences.*

Solvents for Cholesterine, Etc.—In an interesting and important article in the last number of the *American Journal of the Medical Sciences*, Dr. T. H. Buckler, of Baltimore, relates his experience with chloroform and succinate of the peroxide of iron as solvents for cholesterine and cholesteric fat; he has invariably found them successful. The chloroform is used in teaspoonful doses every hour during the existence of acute pain produced by the impaction of calculi in the duct of the gall bladder, and after each meal, when the urgent symptoms have subsided. But although, both on account of its solvent and its anæsthetic powers, chloroform was found by far the best remedy for the acute symptoms, it had no efficacy to prevent the formation of other stones. Considering that the difficulty of dissolving cholesterine depends upon the small amount of oxygen which it contains, it was thought that substances containing oxygen in large proportion would be most likely successfully to combat the cholesteric tendency. With this in view, the peroxide of iron and succinic acid were selected, and from them Dr. Stewart, the chemist, of Baltimore, prepared the hydrated succinate of the peroxide of iron. This substance, when taken in about 15 grain doses after each meal for more than six months, had the effect of preventing the accumulation of biliary calculi. It is also stated that this salt may be used with advantage by persons having a tendency to obesity, or where there seems a probability that fatty degeneration is invading the heart or other organs. Dr. Buckler considers it important that this succinate should be prepared in the hydrous state, and kept constantly in a water bath, as, if dried, it does not dissolve in water.

Operation for Relief of Artificial Anus.—Dr. Kinlock, of South Carolina, reports in the *American Journal of Medical Sciences* a case of artificial anus, from gunshot wound, in which *seven months* after the reception of the injury, during which time the function of the lower portion of intestine had been suspended, he succeeded in uniting the upper and lower portions, and converting the artificial anus into fæcal fistula, by which means the patient was rescued from approaching death by starvation. The condition of the parts was such that it was necessary to lay open the peritoneal cavity and break up the adhesions already formed. The results were not all that had been expected, but were sufficiently beneficent to serve as an argument against the practice of abandoning intestinal lesions to nature. Three years after the operation the patient weighed over 200 pounds, and could ride half a day, or walk a mile without resting.

Index of Physical Endurance.—Dr. Ruschenberger, of the Navy, concludes that the length of the cerebro-spinal axis, measured from the perineum to the vertex, affords a better index of physical efficiency than the total height of a man. Adverting to a paper in which Dr. B. A. Gould states that the "tall men did not wear as well as the shorter," he remarks: "Observation has led me to conjecture that, as a rule, men of average height, made up of a long trunk and comparatively short lower extremities, possess greater power to endure with impunity great labor and exposure to vicissitudes of all kinds than men who have comparatively long lower limbs and short trunks. A long and otherwise fully developed trunk affords more space for the accommodation of organs essential to life than one of smaller dimensions. The size of the contained organs is proportionate to the capacity of the cavities provided for them; and it may be assumed that all things being equal, the size of an organ is a measure of its power.—*Am. Journal of Med. Sciences.*

Cerebro-Spinal Meningitis.—In an analysis of one hundred and sixty-one cases of cerebro-spinal meningitis, which occurred at the Philadelphia Hospital during the winter of 1866 and 1867, Dr. Githens makes the following statements:

The patients ranged from eight to sixty-eight years of age, and with few exceptions were intemperate and irregular in their habits; they lived in filthy neighborhoods, in crowded tenements, and frequently in underground apartments. The disease showed no signs of contagiousness, the cases being confined to no particular part of the house; two cases rarely came successively from the same ward. About a week of prodromata generally preceded the attack; there were muscular pains, general soreness, tenderness of the surface, so that a touch became painful; nausea and bilious vomiting, but little or no disturbance of the bowels. The eruption, which was one of the symptoms generally ushering in the real onset of disease, was not at all uniform in character, while thirty-seven out of ninety-eight cases had no eruption at all. The peculiar expression of countenance, the depressed corners of the mouth, the wild, staring, watchful gaze of protruded eyes, and the congested conjunctiva, were characteristic. Thirst as insatiable as in cholera wasmarked and persistent. The temperature was lower than is recorded of any other typhoid disease, ranging from 100° to 105°. The duration, including prodromata, was in many cases from twenty to thirty days. Death occurred in a little over 26 per cent. of the cases treated. Carbuncles and boils were frequent sequelæ; deafness, more or less marked, resulted in sixteen cases.—*Am. Journal of Med. Sciences.*

Elephantiasis Græcorum; both Common Carotids Tied.—Dr. J. M. Carnochan reports to the *Am. Journal of Med. Sciences* a case of the above disease, which had invaded the skin and subjacent tissues of the face and neck, spreading from a small pimple below the right corner of the mouth, until, at the end of fourteen years, the parts presented the appearances characteristic of leontiasis; sight, hearing, and smell were gone, from obstruction, and taste and sensation were blunted. In the early course of the malady excision of the individual tubercles as they appeared, and later, constitutional treatment had been tried without essential benefit. In November, 1858, the right common carotid was ligated, and the operation caused so great a diminution in the size of the morbid growth that sight and hearing were restored. At the end of six months, the disease appearing to be stationary, the left common trunk was tied. This caused a still further improvement, which continued until the fall of 1860, when the curative process was apparently passive. During the next six years various secondary operations were performed for the removal of nodular masses which had either appeared since the operations, or not shrunken equally with the surrounding parts, until, in December of 1866, it could be noted that there was no disposition in the disease to extend, but, on the contrary, to further diminish; the senses were perfect, the operation of the brain unimpaired, the general health excellent, the spirits good, and the patient a useful member of her household.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & Co. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, October 1, 1867.

MEDICAL CLIQUISM.

THE strong tendency to aggregation which is manifested by similar particles is a prime fact among the phenomena of the material universe. Star-dust will not lie in nebulous masses, but ever resolves itself into separate suns, each one, doubtless, with its attendant planets circling through infinite space. To the same law the rock-ribbed earth is found obedient, as the orderly stratification of its crust bears witness; and when to inanimate matter the higher principle of life is introduced, the uniform activity of corresponding forces becomes still more apparent. The terse old saw concerning birds of similar p'umage has lost none of its truth. With the affinities which group individuals of the human race, all are familiar. Regarding the custom of the angelic hosts it may not be prudent to inquire, but there is high authority for the belief that even "devil with devil damn'd firm concord holds."

With such an array of facts from the order of nature ever before their attentive eyes, it might be supposed that the members of the medical profession would constitute the most harmonious brotherhood imaginable. Animated by the spirit which community of pursuits should engender, the noble army of doctors might not unreasonably be expected to present the charming spectacle of a body of philanthropists, cordially coöperating for the good of humanity and of—each other. Strict regard for scientific accuracy, however, compels us to conclude that we are yet far from realizing so happy a picture. Close inspection shows the mass of physicians divided into little societies, clubs, or cliques. The members of these fraternities are held together either by sentiments of mutual admiration, by a show of scientific zeal, or with shame be it said, by disappointment and jealousy. Men of congenial temper are instinctively drawn into contact. Some one, of perhaps more than average ability, forms the nucleolus of the happy band. Mirror-like he reflects the compliments of his friends, who in turn are too polished to absorb such comfortable radiations. All is light and warmth in these pleasant circles. It is the old story of the oak and the ivy—fair to the eye, and without reproach till perchance the venerable trunk has surrendered life and substance, when the whole growth, late so leafy and graceful, falls suddenly to earth, a most pitiable ruin. All this, however, is harmless enough. The tie of friendship is as sacred and as worthy of honor when it unites the members of our profession as when it draws together any other harmonious souls. It is only when mutual esteem degenerates into mutual flattery, begetting exclusiveness and contempt for outsiders, that such association degenerates into cliquery.

Upon the solid foundations of the medical schools, are usually based cliques of a scientific sort. Here are gathered the high-priests of the profession, so many at least as can gain admission to the ranks of the faculties, and around them cluster a swarm of neophytes ready alike to fill the air with a hum of applause at the dicta of their chiefs, or to fly in the faces of all who would doubt the prowess of their champions. Very worthy and very useful bodies are these, so long as they are content to "improve each shining hour;" but when rivalry or opposition stirs the hive, alas! for defenceless humanity!

It is in this connection that we feel constrained to remark upon certain practices which are in vogue among the members of these corporations. The rivalry of the schools excites their officers to every possible effort for the attraction of students, not merely by the quality of the instruction imparted, but by the hope of assistance and advancement after graduation. For these hopes the younger men are expected to lend their backs as stepping stones for the progress of their master, whose personal ambition is after all the main-spring which sets in motion so many wheels of selfishness. With all this, however, fault could not be found, were not the most unwarrantable methods of advancement, copied from the lowest forms of political trickery, too often adopted by men whose position and renown should place them above all that is dishonorable. It is impossible to convict these offenders; for such is the organization of the cliques in which they move, that upon no individual member can be charged the responsibility for any given act.

Another flagrant abuse of the principle of association is shown by the fact that in consequence of these cliques it has become well-nigh impossible for any one outside of the number of their favorites to obtain a position in our hospitals and colleges. Scientific attainments weigh but lightly against the influence of a well-organized club. When a vacancy occurs on the staff of a hospital or in the faculty of a college, it does not seem so much a question of intellectual fitness which first arises concerning the candidate, as the nature of his connections and the degree of his availability. Who are his patrons? What will he do for me? These are the questions which occupy too much the minds of those who have a voice in the matter. In this way our college faculties and hospital boards become the most exclusive

bodies, of whose members too many will stick at nothing for the gratification of their own selfishness. This is one of the evils which recoil upon the malefactor, for no one can be at the same time a college professor, a physician or surgeon to three or four hospitals, and the master of a large practice, without losing ground as a man of science. This overreaching ambition renders the lives of some of our ablest men almost useless to the profession, and hinders the accomplishment of anything which may serve in future as a monument to their memory. Could a tithe of the time which these gentlemen now spend in racing from one operating theatre to another be occupied with careful study and collation of their cases, how much more enduring would be their own reputation—how much more instructive the medical literature of their day!

Basest of all the cliques are those which have for their object money. Science, honor, the esteem of their fellows, all go for naught with men who for gold or for the hope of gold are willing to enter the organized cliques into which quackery subdivides. Lamentable, indeed, is the spectacle presented by the young man who at the outset of his professional career, destitute of principle, and only ambitious for pecuniary success, stands balancing with all his feelers in motion, seeking admission to some little association which shall bear him easily on to fortune. To become the satellite of some great man, or a noisy member of a mutual admiration club, or the appendage of even a political party which may have favors to bestow, these are his first objects of desire. Failing here, the unscrupulous fortune-hunter consents to discuss homœopathy, eclecticism, whatever disreputable thing may promise most. Surely and rapidly downward tends the course of the adventurer, no matter how fair the mask with which he seeks to captivate the eyes of the world. When shall the noble title of physician be no more defiled by these carrion-crows of the profession?

Do these facts seem to contradict the law of nature? On the contrary, they exhibit exact conformity with that law. Like seeks like, and congeniality will govern the association of the best of men. It is only the abuse of what is in itself good that gives occasion to the complaints which are rife. Physicians are but men; and while they continue to be animated by the motives which influence the mass of mankind, it is useless to expect greater unanimity. Only when the spirit of the golden rule shall become alike the guide of the philosopher and the peasant; when the lion shall lie down with the lamb, and doctors cease to disagree, will cliques and all their attendant evils be known no more.

During the past fortnight, Mr. T. Spencer Wells, of London, has paid a visit to this country, and it should be a cause for congratulation among American physicians, that he carries with him such a high opinion of our professional character, and our institutions. During his sojourn, at first in Canada, and afterwards in Philadelphia, New York, and Boston, every professional courtesy has been extended to him, to which his enviable reputation as one of the most celebrated operators of the age entitle him. The letter from our correspondent in Philadelphia gives us a graphic account of his doings in that city, and his reception there. It is needless to say that our own city was not behindhand in tendering professional courtesies to the great ovariotomist. While here, he was the guest of Prof. B. Fordyce Barker, who kindly invited his professional brethren to meet Mr. Wells at the Mott Memorial Library, and the large number in attendance on that evening must have shown the distinguished foreigner that his services in the cause of science had been duly and appreciatingly recognized. With a taste that is in every respect to be commended, the gathering was a purely social one, and everything was done to make the evening pass pleasantly and profitably, not omitting the elegant supper provided for the occasion. The selection of the building was a good one, and was singularly appropriate as honoring the name of one of our illustrious dead, by the presence in the Memorial rooms of one who has written the most touching and chaste obituary of Dr. Mott which has ever emanated from the transatlantic press. It is perhaps needless to call to the mind of many of our readers that the memoir referred to was the one penned for the columns of the *Medical Times & Gazette*, of London. The occasion was a rare one, and was seemingly as pleasant to the guest as to the rest of the company.

The day following, in company with Dr. Emmet, he visited the new Woman's Hospital, just opened, and the New York Hospital in company with Dr. C. M. Allin, one of the visiting surgeons. By special invitation the succeeding day, he offered some remarks upon the subject of ovariotomy, to a large and appreciative audience, who were at the same time delighted with his easy and elegant delivery, and edified by his practical and common-sense observations. The substance of his remarks will be found in the letter from Philadelphia. Starting, after this short stay, for Boston, he remained in that city for a few days, and departed last Wednesday for his home.

During his lecture at Bellevue, in speaking of the character of our physicians, and of the means which they had at their command for the study of disease, he made the remark that British physicians should now think as much of coming to this country, and making themselves acquainted with what was being done here, as we formerly did of taking a trip to Great Britain. This, coming from such a source, is full of significance, and should encourage us to profit still more from the means so abundantly placed before us. He can be assured, in turn, that he carries with him the esteem and admiration of his American cousins. It is a pleasing task to record such interchange of courtesies, and we hope to be able soon to have another occasion to perform a similar one.

Reviews.

THE PRINCIPLES AND PRACTICE OF DISINFECTION. By ROBERTS BARTHOLOW, M.D. Cincinnati, 1867. 12mo, pp. 111.

THIS is a very useful manual on the subject of which it treats, and is in a form very convenient for use. The author, in his first chapter, speaks of the substances on which disinfectants are intended to act; which he divides into two classes: 1. Those developed in the process of putrefactive decomposition of animal and vegetable matter; and 2. That peculiar organic matter to which we apply the terms virus, *materies morbi*, morbific matter, diseased germinal matter, etc. It is assumed with great probability, contrary to the theory of Liebig, that *materies morbi* is *living matter*. If so, the *zymotic* theory must be abandoned, together with the nomenclature founded on the doctrine of a *ferment*. Discovery and science seem rapidly tending in this direction. We never were fully persuaded of the truth of Liebig's theory of fermentation in living bodies. Our townsman, Prof. Paine, has well-nigh exploded all this. Prof. Beale now comes in to declare the theory "not only unreasonable in itself, but as obstructing the progress of knowledge." What then? Are we prepared to embrace a theory of disease based entirely on microscopic researches? Shall we believe Dr. Beale and others when they assure us that the power of growth and the production of tissue depend upon minute masses of "germinal matter," and that there is no distinction, chemical, physical, or microscopical, between the normal germinal matter employed in building up tissue, and the abnormal or diseased germinal matter which excites the phenomena of disease? We are not about to dispute this point; if a microscopist claims to see what no one else has ever seen, or not to see differences acknowledged by all others to exist, we think, instead of taking his statements as truth, it is better to wait for further observations and developments. We are in no hurry on these theoretic points, we can afford to wait; and we think it by far the safer course to adopt. It is becoming quite too common to overlook the vital endowments, and vital properties. On Dr. Beale's theory we don't see why all diseases should not be communicable, for, if the degraded germinal matter, which is contained in discharges from the lungs, skin, and intestinal canal, fall into suitable soil, they will grow and multiply, and thus propagate these diseases, and as the atmosphere is said to be filled with all manner of diseases, the germs of *vibrio*, *cacteriæ*, and *monads* of the animal kingdom, and spores of *fungi*, *mycoderms*, and *mucedines* of the vegetable kingdom, *pus* cells in hospitals, and *cholera* cells wherever this disease prevails, the theory of disinfection becomes simplified, so that, instead of confining our attention to destroying noxious gases, and the volatile products of putrefactive decomposition, we must especially seek to attack and destroy these *cells*, the *virus* of disease, the *materies morbi*. We must direct our attention to diseased *germinal matter*. *Foul odors* are nothing, except as they lower the vital forces, the power of resisting and throwing off disease; in other words, preventing the action of this morbid cellular growth—disease-producing matter. Where must our disinfectants be applied in order to be efficient? Evidently, where the diseased matter is. In cholera, to the choleraic discharges; in small-pox, scarlatina, etc., to the air in which the germinal cellular matter floats.

Chapter II. treats of the "*Mode of Action of Disinfectants*." In this we discover nothing new. The author first describes the agents that chemically destroy the noxious compound. Second, Those that arrest chemical change, antiseptics. Third, Agents that physically restrain the noxious compound. Under the first class he ranks *heat*, *ozone*, *chlorine*, *bromine*, *iodine*, *nitrous acid*, *sulphurous acid*, and *the chlorides* and *sulphates of mineral bases*. Of these heat is considered the most powerful, and may be assigned to each of the three classes.

Chapter III. treats of the "*Application of Disinfectants*," under the following heads, viz.: "Disinfection of air," "disinfection of solids and liquids," "of water," "of the discharges of the sick," "of cesspools," "of clothing, bedding, etc.," "public disinfection," "purchase of disinfectants, etc." To these is added a notice of recent papers on disinfectants. Altogether the work is creditable to the well-known talents and industry of the author, and we would strongly recommend it as the best manual on the subject yet issued from the press.

Correspondence.

MEDICAL MATTERS IN PARIS.

(FROM OUR OWN CORRESPONDENT.)

PARIS, August 19, 1867.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—The School of Medicine held its annual closing ceremonies on the 14th. M. Béhier pronounced an eloquent eulogy upon Rostan. On the 17th the amphitheatre of the Ecole was again filled to celebrate the opening of the International Medical Congress, where seven hundred physicians from all parts of the world, representing nearly all the celebrated physicians living, had gathered together.

THE INTERNATIONAL MEDICAL CONGRESS.

The hemicircle was draped with the flags of all nations. The eagle of Prussia floated in the midst of the colors of France, and the Turkish crescent fraternised with the banner of England. M. Bouillaud presided, supported on the right by M. Gavarret, on the left by M. Tardieu, and pronounced an eloquent address, whose feeling was responded to by every member of the great assembly. When the illustrious professor said, "I cannot contemplate this scene without being profoundly moved; I feel my feeble powers fail to express the just sentiment of the occasion," all the audience replied by bravos the most sympathetic; and when the orator concluded, "Let us rise to salute these entwined flags, and then unite our hands as they are united, in sign of complete and cordial fraternization," the enthusiasm was at its height, and the amphitheatre resounded with a thunder of applause.

But alas! having been at its height, it was all the more liable to fall. The day was very hot, and the old amphitheatre was constructed for other purposes than those of ventilation. The question of the day was tuberculization; and after the reading of the first memoir, the audience began to reflect, to calculate that many more were to follow, that they were "in" for three or four hours at least. People grew restless and anxious. Presently every one was electrified with a voice, whose timbre, entirely exotic, pierced right through the decorum of the assembly.

"M. President, is it permitted to ask a question?"

"Certainly; speak."

"I am a stranger; I am a physician from Holland,

and as a Hollander I have been invited to assist at the International Congress, but I find I have made some mistake; for in my opinion this is no congress, but a class, a school-room, where some doctors have come together to admire each other, and hold themselves up for admiration."

Literally, that is what the honest Dutchman said. He spoke with all the traditional phlegm of his race; he scanned each word, and the ironical syllables fell into the midst of the "band of brothers" like so many bomb-shells. Of course there was confusion, and calls to order; then, finally, the reading of the papers on tuberculization was resumed.

The other questions that will occupy the Congress are as follows:

Second Session.—Continuation of the discussion on tuberculosis. Discussion on the influence of climates, races, and different social conditions upon menstruation in diverse countries.

Third Session.—On the constitutional accidents which occasion death after surgical operations.

Fourth Session.—Is it possible to propose to different governments efficacious measures to restrain the propagation of venereal diseases?

Fifth Session.—On the acclimatation of the races of Europe in warm countries.

Sixth Session.—On the influence of alimentation upon the production of certain diseases in different countries. (The memoirs announced upon this question all relate to pellagra.)

And in the same séance will be developed some considerations upon entozoa.

This programme promises well, some of the topics being of extreme interest and importance, and only capable of being studied in the light of the experience of physicians of many nationalities. All the medical world that is not at the congress has gone into the country, whither we will follow them, and collect some gleanings from the rich harvest of the provincial societies, which in intelligence and learning are not inferior to those of Paris.

THE CONTAGION OF CHOLERA.

The Imperial Society of Medicine at Lyons, in the séance of the 15th of July, listened to a dissertation by M. Rodet, upon the capital question of the contagion of the cholera. M. Rodet, who occupies a middle ground between the non-contagionists and the contagionists, commenced by citing a certain number of facts that had been adduced by each party in proof of its theory. On the side of the first, four. In 1835, the vessel Ville de Marseille was stationed two or three miles from Toulon, where the cholera was then raging, and the crew had frequent intercourse with the infected city, yet not a person took the disease. In 1831, among a hundred nurses and attendants upon cholera patients in the hospital at Cairo, not a single person took the cholera; eighty nurses in the hospital of Monsourah have enjoyed the same immunity; and among sixty at the hospital at Damiette, only one took the cholera. Again, at the Hospital of the Dey at Algiers, the immunity of the persons attached to the cholera wards was so great in 1865, that one might have supposed them to be asylums of refuge. Finally, in the Military Hospital of Constantinople, 1,488 cholera patients were received from the 27th of January, 1855, to the 31st January, 1856, of whom 658 died. Their clothes and linen were washed by the hospital attendants; the privies exhaled from time to time fetid emanations, which spread throughout the hospital, and even beyond its precincts; yet in spite of so many conditions favorable to contagion, the disease was not communicated to any other patient, or to any of the persons attached to the wards.

It is noticeable, however, in connection with the first case cited, at Toulon, that although the crew of the Ville de Marseille was so remarkably spared, twelve physicians succumbed to the epidemic. In 1865, there perished in the same city six physicians, two apothecaries, ten nurses at the marine, and five at the military hospital, in all twenty-three persons connected with the care of the cholera patients.

In these cases, however, the non-contagionists may still urge, that the victims were at the same time exposed to epidemic influence, so that it is impossible to tell what share contagion had in the infliction of the disease. This argument does not hold in regard to seven other cases quoted by M. Rodet, occurring during various epidemics, and one related in detail by M. Petiteau, that he observed last September. In all these cases the infection seemed to be directly transmitted by persons going from an infected to a healthy locality, was first communicated to persons with whom they came directly into contact, and thence from individual to individual, over a certain radius, after which the morbid influence seemed to be extinguished. In only one case was a wide-spread epidemic excited. In five of these eight cases the disease was imported by people who had visited the infected locality, merely during a few hours or days, and were attacked shortly after their return home, communicating the disease to those who nursed them. In M. Petiteau's case the attendants on the patient escaped, but after his death a drunken comrade, who persisted in passing all night by his corpse, embracing it, and committing a thousand extravagances, was speedily smitten. Twelve cases followed this infection, of which six died. In the cases cited by Rodet, for the first, only the son and husband of the original patient died, while she recovered, and the disease went no further. In the second instance, only the mother of the patient was carried off, while he recovered. In the third, fourteen persons perished out of a population of 130 inhabitants. In the fourth, there were thirty-one deaths in thirty-four days. The other three instances of infection mentioned by Rodet were occasioned by the flight of persons from places where they had lived, for some time during the prevalence of the epidemic, into healthy localities. In the first case, a general epidemic was lighted up. In the second, all the members of a family living in different houses were successively attacked. In the third, twenty-seven persons were attacked, of whom twelve succumbed.

M. Rodet, although attaching full importance to these facts, as proof of the communicability of cholera by direct contagion, is careful to point out that such influence cannot explain all the bizarre phenomena of epidemics, and that it is necessary to admit, over and above the focus of infection, a general cause which hovers over all the individuals placed in this focus, an epidemic cause, a *quid divinum* or *ignotum* as has been so often repeated.

The *Medical Gazette* of Algiers reviews a recent work by M. Jules Girette, where this question of the epidemic influence is treated on the largest scale. This writer, by the very title of his work, Civilization and the Cholera, betrays that his views are liable to be all rather biassed by the idea that belief in contagion must tend to barbarize nations, and hence ought to be discountenanced on moral grounds. It is rather unfortunate that this initial bias should be so perceptible, for it somewhat tends to shake the reader's confidence in the complete impartiality of the author's statements. Yet various circumstances pointed out, concerning the march of the epidemic of 1865, along the shores of the

Mediterranean, seem certainly difficult to reconcile with the theory of the perfect efficacy of quarantine. "Greece and Sicily isolated themselves completely, and escaped the cholera. But so also did Corsica, which continued to communicate freely with the infected cities of Nice and Livourne, and only subjected vessels coming from Marseilles, where the epidemic was at its height, to a quarantine of three days. Salonica and Volo, unexpectedly exposed to the contagion, after a prolonged quarantine, nevertheless escaped. Neither Sarnsoum, nor Catourn, nor Dourgas, nor Varma were attacked by the cholera, although they were constantly visited by emigrant vessels. It scarcely touched Trebisond, traversed by hosts of fugitives *en route* for Persia. Yet all these ports had no other defence than a quarantine of from three to five days. At Malta, Beyrout, Dardanelles, and Odessa, the epidemic was communicated to the city by the lazaretto that professed to protect it. At Constantinople, a Turkish frigate evaded the quarantine, and imported the disease. Majorca, surrounded by a *cordon sanitaire*, attributed the cholera by which it was decimated, to some secret fraudulent importation, since no other cause could be discovered. The same with Alicant. At Enos the epidemic raged, and could be explained by no suspected communication. Trieste, spared up to the 28th of September, and believing itself secure behind a model lazaretto, awoke to find the cholera within its walls. Southampton, freely open to arrivals from Alexandria, did not register its first death from cholera until the 25th of September, nearly at the same time as Trieste, and two months after Marseilles."

M. Girette, however, takes great pains to trace the march of the epidemic of 1865, from its cradle, among the hordes of pilgrims to Egypt. M. Jobert, however, sanitary physician on board the Arethusa, who reviews the book, lays much more stress than the author upon the fact that some new and peculiar atmospheric conditions, or epidemic capacity, must have prevailed at Egypt during that year, since every year the pilgrims were in the habit of having the cholera at Hedjaz, but it was not communicated beyond their own camp. M. Jobert quotes with especial emphasis the description given from personal observation by M. Girette, of the state of things at the temple of Withoba, at Punderpoor, where men and women were crowded together by thousands, in a narrow court, awaiting their turn to enter the temple. Inside the little stone temple the same, and worse; the emanations from the bodies of the worshippers condensed upon the statue of the god, and the moisture was regarded as a miraculous sweat! The resident physician at Punderpoor believes that the first origin of the cholera is probably at this celebrated shrine.

To return for a moment to M. Rodet. He speaks hopefully of the good effects of the treatment suggested by Dr. Burg, and in 1865 experimented by M. Lisle, physician at the Insane Asylum at Marseilles. Upon the appearance of the epidemic in the asylum, M. Lisle had at first endeavored to combat its ravages by the ordinary method of diffusible stimulants. He lost twelve patients out of fourteen, a number much greater than the ordinary average, and whose excess is to be attributed to the much feebler resistance to the disease offered by the insane. Finally the servant of M. Lisle was attacked; he employed the same treatment, and with equal lack of success, for at the end of twenty-four hours all hope seemed to be lost. In this extremity he resolved to try Dr. Burg's prescription, and considerably to his surprise the woman recovered. He then applied the same treatment to the remaining patients in the wards, and the results surpassed his expectations. Among twenty-six men he obtained twenty-one recoveries, and among six women (including his servant), four; in all, twenty-five cures among thirty-two cases.

The following is the formula for the remedy that obtained such unlooked-for success:

Dissolve five per cent. of sulphate of copper in 150 grammes (about five ounces) of distilled water; and add to this 150 grammes of sugared water, together with 10 drops of Sydenham's laudanum.

A CASE OF OSTEOMALACIA.

At the Society of Medical Sciences at Lyons, was recently presented by M. Vérard, a most interesting case of osteomalacia. The patient, as usual, a woman, was thirty years old, and had been the victim of the disease for ten years at the time of her death, which occurred in an attempt at child-birth. I have been unable to find the details of the case as related by M. Vérard, having only at hand a subsequent report upon the case, made by Dr. Berne, surgeon at La Charité at Lyons.

In this report is only noticed, that the commencement of the disease had been characterized by sharp pains, which had been supposed to be rheumatismal; that the pregnancy had, as usual, greatly accelerated the march of the disease; that the diseased bones presented were all highly porous; that in the spongy tissue, the osseous trabeculæ had become rare, or had disappeared; the medullary spaces had united together, and in the hollow bones contributed to enlarge the medullary canal; that even in the cortical compact substance, the vascular canals were enlarged, and formed areolæ, which uniting transformed it into a spongy tissue of large network; which indeed was so general that the compact tissue had almost disappeared, and there only remained the superficial layer, which, moreover, was infiltered by a yellow, fatty, medullary substance; that, besides, in the parts of the osseous system which were the most altered, were discovered numerous cells resembling pus globules.

This last fact seems to confirm the opinion of Virchow, who ascribes osteomalacia to a parenchymatous inflammation, the immediate consequences of which are only an interstitial exudation, but the remote result is the destruction of the osseous tissue.

A chemical analysis of the bones was made, principally with a view of searching for lactic acid, and thus indirectly testing the theory* that ascribes the resorption of the lime salts to the presence of this agent. It was impossible to find lactic acid in the free state, for at the time the analysis was made, the bones had already submitted to maceration for several days in water saturated with marine salt, and the acid, if present, would necessarily be dissolved. But some lactates might still be left. To settle the question, the ashes of the calcined bones were treated with water, thus losing a considerable portion of their weight (0·42 gr. out of 0·99 gr. for the spongy substance, and 0·23 gr. out of 1·73 gr. for the compact). The filtrated substances, precipitated with nitrate of silver, gave 0·20 chloride of sodium in the first case, and 0·10 in the second. Remained 0·22 and 0·13 of residue, in which, if anywhere, the lactates were contained. In this residue, dissolved in distilled water, the presence of an organic acid was presently proved by the addition of a few drops of nitric acid, then lime-water, which formed a precipitate, proving that the nitric acid had found material to convert into oxalic acid, which produced an oxalate with the lime. Further examination showed that the solution did not precipitate with baryta-water, had no action upon lime-water until it had been treated with nitric acid, and gave a white

* Of MM. Marchand, O. Schmidt, and Otto Weber.

precipitate with concentrated acetate of zinc, whence the presence of lactic acid was conclusively proved.

The usual disproportion between the organic and inorganic materials of the bones was also shown by the analysis. The proportion in 100 of the inorganic matter instead of being 64, the normal figure for compact bone, was 41, and in the spongy substance not more than 18.

The proportion between the carbonates and phosphates remained the same, the former being one-tenth the weight of the latter.

M. Vérard very justly regretted that no experiments had been made to ascertain whether, in spite of the narrowness of the basin, the head of a fœtus could not have been made to pass, in virtue of the softness of the bones. The antero-posterior diameter of the inferior strait only measured from a centimètre and a half to two centimètres; but the bones were so soft, that the first placed in the pelvic cavity easily forced a place for itself. Dr. Berne thought that in a similar case, at a moment of *accouchement*, before the obstetrician should address himself to the cesarean operation, he should seriously consider whether the pelvic basin were not susceptible of enlargement by dint of pressure. In the case in question, I am unfortunately unable to tell what was actually done.

THE FUNCTION OF THE VASCULAR GLANDS.

At a recent séance of the Academy of Medicine in Belgium, Dr. Foisson read a paper, propounding a theory on the function of the vascular glands, that seems to me much the most ingenious and complete of any that has ever been advanced concerning them. This theory carries out the suggestion made by Broussais, who assigned to the spleen the function of deviating the blood from the stomach; so the thymus and thyroid, a similar rôle for the respiratory organs. This idea, however, being based upon no serious proof, passed unperceived. But M. Foisson has greatly enlarged and strengthened it in his essay, of which I shall endeavor to give you an idea.

The general theory of derivation is the following: All organs submitted to alternations of action and repose, require a greater amount of blood during the first than the second period. The variations thus necessitated in their circulation, are effected by an agency independent of the general circulation, namely, the appropriate vascular glands, that act by driving the blood away from the organs when they have no need of it.

The only organs in adult life, engaged intermittently in active functions, are the muscles, stomach, brain, and uterus.

The muscles, when acting separately, mutually derive the blood from one another, and when they act all together, the heart quickens its action, and sends the excess of blood required. Their variations, therefore, depend directly on the general circulation, and they have no need of special apparatus.

But the stomach is essentially intermittent in its activity. The secretion of gastric juice evidently demands a large amount of blood, to judge from the size of the arteries distributed to its walls. During the intervals of digestion, these arteries are tortuous, and comparatively little blood passes through them. The blood from the cœliac axis being mainly distributed by the splenic artery to the spleen, the tortuousness of this splenic artery may be supposed to be unfolded at an opposite time from that in which the gastric arteries grow straight.

The thyroid gland is the derivative reservoir for the blood going to the brain. This blood arrives at the thyroid from the superior thyroidien given off from the internal carotid—and the inferior thyroidien, that springs from the subclavian close by the origin of the vertebral, so that by a double route the circulation of the thyroid can affect that of the encephalon. In virtue of that same connection, between the thyroid and the brain, do persons affected with goitre so often become cretins; the exaggerated development of the thyroid interferes with the nutrition to the brain, and the more important organ is actually starved out by the fraud of the less, which seizes its supplies *en route*. Finally, for the uterus, the mammary glands perform the office of derivation, and, after parturition, when the uterus must retract, and has no further need of the expensive nourishment upon which it has subsisted during pregnancy, the epigastric arteries, prepared for the task by the development they have experienced during the last months of this period, intercept the supply of blood going to the uterus, and convey it to the glands, by means of their anastomoses with the mammary arteries. Among animals in whom the mammary glands are abdominal, the epigastric artery supplies them directly. To this extremely suggestive interpretation of the well-known facts of the case, one difficulty may be addressed. If the extra nutrition of the uterus and mammary glands is carried on at alternate periods, how does it happen that the glands increase during pregnancy? This fact, however, is really provided for by the theory which admits that the satellite organs do increase coincidently with their principals, if only for the sake of being at hand, and in good condition, to receive the brunt of their circulation when the functions of the principal organ is intermittent; but that in addition to this parallelism of development, comes the alternative, or contrast, at the moment when the principal organ subsides into inactivity, and the satellite starts into full activity.

For explanation of the office of the thymus gland and supra-renal capsules, the theory is identical, but applied as it were in an inverted fashion as respects chronological order. The lungs and kidneys do not function at all* during fœtal life, and hence have need of only so much nutritive fluid as is required for their growth. But as they begin to act at the very moment of birth, the new supplies necessary for the maintenance of their functions must be stored up close at hand, ready to be turned into their future channels. For this purpose the thymus gland and supra-renal capsules are contrived. The blood during fœtal life is directed towards them, as it were next door, but at the moment of birth the current is turned into the neighboring arteries, and from that moment the fœtal organs begin to waste and gradually disappear.

The thyroid gland also, though in action throughout life, is much required during infancy, since the brain at that period, as far as regards its intellectual functions, is in a quiescent or at least passive state, consequently the thyroid gland of children is proportionately much larger than in adults.

M. Foisson refers to the characteristics common to the structure of all the vascular glands, as tending to confirm his theory. Huschke and Kolliker agree in recognizing in all these organs the existence of:

1. A foundation system of trabeculæ, serving for a support to the vessels.

2. Vesicular cavities occupying the interstices left between the trabeculæ.

3. The presence in the cavities of a liquid charged with globules, and the absence of any efferent canal. Nothing in this structure suggests the idea of a secre-

* This is the remark of the author. But I believe it is not strictly correct for the kidneys, since the bladder is found to contain urine before birth.

tion appropriated to the perfectionment of the blood or lymph, while it is on the contrary marvellously adapted for the purposes of derivation.

The entire theory is resumed in the following propositions:

1. All the organs of the economy consume during the periods of their activity an amount of blood more considerable than that required in repose.

2. In the normal state, the heart sends at each moment the same quantity of blood in every branch of the arterial tree.

3. The blood which arrives at organs in excess during their period of repose, is received by special organs called *derivators*.

4. The function of derivation may be performed without the intervention of an organ exclusively devoted to the task, as in the case of the mammary glands.

5. Every organ whose function is intermittent, possesses an apparatus for derivation.

6. Derivation is not only arterial, but sometimes venous, as when the spleen receives the *trop plein* from the portal vein, or the thyroid, during muscular exertion, from the engorged jugulars.

7. Derivation is a complementary function of the circulation, and necessary to a regular distribution of the materials of nutrition and secretion. At the same time it is not absolutely essential to life, so that in the lower animals any of the vascular glands may be extirpated with impunity.

8. Derivation is explained by the following law of physics: When a pipe traversed by a fluid is divided into two branches, that of the two in which the current is the most rapid receives a greater quantity of liquid than the other.

This theory is so perfectly captivating to me, that as yet I have not been able to imagine any serious objection to its soundness. Perhaps you or your readers may be more critical, and I submit it to your judgment.

UNION BY FIRST INTENTION AFTER LITHOTOMY.

Professor Bouisson, of Montpellier, is at present writing a series of articles in the *Montpellier Médicale*, upon union of the wound by first intention after the operation of lithotomy. The Professor not merely believes this to be possible, and in his first paper adduces four cases in proof of his assertion, but engages to show how this very desirable result can be secured. Of these four cases, the first was that of a young man who had been treated for some time with elastic bougies, in the hope of sufficiently dilating the urethra to admit of the operation of lithotrity. All at once, however, the patient became unquiet and irritable; an obstinate spasmodic condition of the canal joined itself to the organic retraction, and forced the surgeon to abandon all hope of crushing the calculus, and an operation for lithotomy was decided upon. Owing to the presumed smallness of the stone, the median incision was selected. The operation was performed on the 16th of December, and encountered no serious difficulties. An incision of three centimètres practised on the median line of the perineum easily attained the urethra. After division of the cutaneous and cellular layers, the membranous portion being directly divided, the length of the left edge of the catheter which had been introduced in the urinary canal to serve as a guide, a lithotome was introduced, the catheter withdrawn, the finger, gorget, and forceps successively introduced into the bladder, and the calculus seized and extracted.

The calculus was spheroidal, with irregular surface, so compact and hard that the operation of lithotrity would have beeen very difficult. A vesical injection terminated the operation, which had been performed with the assistance of chloroform. The knees of the patient were then drawn together, and maintained in an elevated position by a cushion placed underneath; a calming and diffusible draught was administered; the day passed without fever or vesical pain; the patient vomited twice; in the evening a little urine escaped by the natural passage. The next day reddish urine was passed naturally, also a very small amount escaped at the wound, whose appearance was good. During the two following days also the local and general phenomena were satisfactory; the urine nearly entirely passed by the urethra. The wound closed without suppuration, and by the eighth day was *completely cicatrized by first intention*. The cure was permanent.

In the second operation performed by M. Bouisson, the patient was sixty-four years old, and the bladder contained six calculi and was completely paralyzed. After the operation, whose details I will not repeat, the persistent retention of urine, which did not even escape by the wound, rendered it necessary to leave a sound permanently in the bladder, for the accumulation caused much pain and suffering to the patient. By this means also the urine was completely turned away from the wound, a circumstance which undoubtedly favored its union, which was effected in six days, by first intention, without any trace of inflammation or infiltration. In this case also the median incision had been practised. The third, the same form of the operation. The subject was sixteen years old; the calculus, though hard and voluminous, was ovoid, and presented itself to the forceps by its most favorable diameter, so that it was extracted without difficulty. After the operation, the adduction of the thighs was secured by means of an apparatus, so that the lips of the wound were brought in contact, and the dorsal decubitus strictly enjoined. The first day only theurine escaped by the wound; after that the patient was able to urinate voluntarily. Even after the subsidence of the swelling around the lips of the wound, which might at first have opposed the escape of the urine, that liquid continued to traverse the natural passages, and owing to this fortunate circumstance the wound was cicatrized by the sixth day. Neither infiltration, nor ecchymosis, nor suppuration supervened, and the cicatrix remained perfectly solid. The fourth operation, with the medio-lateral incision, was performed on a child of six years old, who had suffered from painful micturition from the age of two years. In this case the first sounding had failed to discover the calculus, and although that was distinctly perceived at the second examination, it seemed again to disappear at the moment of the operation. Nevertheless, M. Bouisson made the incision. The posterior radius of the prostate gland seemed so short, in consequence of the flattening of this organ, that, having practised the median section of the skin as far as the urethra, M. Bouisson judged it prudent to incline the lithotome in the direction of the oblique radius of the prostate, in order to avoid the rectum, and to limit this oblique section to the gland, so that the incision represented a broken line whose first part was straight, and the second oblique. This opening, more than sufficient for the extraction of the calculus, gave issue to a certain quantity of urine, which carried the stone along with it into the very grasp of the forceps. The calculus was the volume and shape of an olive; mammillated, reddish-yellow, and composed of uric acid. The whole operation only occupied three minutes from the moment of the incision to the extraction of the stone.

In consequence of the inclination of the lithotome, a branch of the perineal artery had been divided, giving rise to considerable hæmorrhage, an accident that

had been entirely avoided in the other operations. The hæmorrhage was arrested by torsion of the vessel, but returned some hours after the operation, to be finally vanquished by compression and the application of ice. This was the only notable effect of the operation. The urine escaped by the wound during the evening and in the night; but after the first day the passage of urine ceased to be continual, and came under the influence of vesical contraction. Towards the end of this day a part of the urine passed by the urethra, and from the fourth day no more escaped from the wound, which united without suppuration, and without the occurrence of either sanguine or urinary infiltration. By the eighth day the cicatrization was complete.

All these cures were obtained by the perineal operation. M. Bouisson thinks that such happy results could rarely be achieved when the hypogastric incision was practised. In succeeding papers he hopes to develop further views suggested by the interesting observations of which I have related the summary.

NEW APPARATUS FOR IRRIGATION OF THE EYE.

Dr. Amable Cade, of Saint Andéal, also makes a communication to the *Montpellier Médicale*, concerning a new apparatus devised by himself for securing continual irrigation of the eye after the operation for cataract. This is composed:

1. Of a hemispherical reservoir, of a capacity of nearly a quart, with an opening at the top, and capable of being suspended over the head of the patient.

2. Two supra-ocular recipients, of lozenge shape, each furnished with two little handles, destined either to fix the apparatus before the eyes by the aid of a circular band, or to keep in place the two recipients when both eyes have been operated the same day. Their posterior side is made of gold-beater's skin, which ought to be placed in immediate contact with the closed eyelids.

3. Two tubes, communicating between the reservoir and the recipients. These tubes are furnished with screw joints, which permit the suppression of one of the recipients when only one eye is operated.

4. Little pieces of sponge loosely introduced in the communicating tubes, to prevent the passage of the water, except drop by drop, every second in ordinary cases. These sponges may be removed in case of imminent danger from violent inflammation, when a rapid current of cold water is needed.

5. Two discharging tubes, a yard and a half in length, destined to conduct the irrigating fluid from the recipients to a vase placed by the bedside.

By means of this apparatus, Dr. Cade has already performed eight operations for cataract with the most complete success, in some cases warding off a commencing phlegmonous inflammation, that threatened to become a terrible complication. P. C. M.

Operation for Anteflexion of Uterus.—Dr. J. C. Nott, of Baltimore, suggests a modification of Dr. Sims's operation for the relief of dysmenorrhœa dependent on anteflexion of the uterus. After making the bilateral incisions through the neck, he allows the hook to remain in the *anterior* lip while the posterior is cut off by curved scissors. By this expedient the canal of the neck is kept open, and after the internal posterior longitudinal incision the sponge-tent is *at once* and easily introduced. Any vessels divided should be immediately ligated. He suggests also an alteration in the tents, by which they are rendered firmer, more cleanly, and more rapidly effective.—*Am. Journal Med. Sciences.*

MEDICAL MATTERS IN PHILADELPHIA.

[FROM OUR SPECIAL CORRESPONDENT.]

VISIT OF T. SPENCER WELLS, OF LONDON, TO THE CLINIC OF THE JEFFERSON MEDICAL COLLEGE,

AND REMARKS BY THAT GENTLEMAN UPON

OVARIAN TUMORS.

To the Editor of the Medical Record.

Sir—With the approach of autumnal changes, greater activity is being exhibited in our medical circles. The summer months, not very warm, have been marked by a most unusual deluge of rain, which has kept the streets of our city comparatively clean, despite the neglect of "contractors," and as a consequence conserved the health of our inhabitants. Such a healthy season as the summer just past has been, has not been known here for years; some go so far as to say that there never has been such a healthy season. The mortality reports have shown a marked decrease in the proportion of deaths as compared with the years more immediately preceding, notwithstanding an evident increase of population. Vernal complaints have not been near as frequent as usual, nor have there been the usual proportion of protracted illnesses. Bilious remittent fever, bronchitis, and pneumonia seem to have been the most frequent disorders, and this has been the result of hospital as well as of private practice. A number of physicians have remarked this season a greater amount of periodicity in disease generally this season, as if a malarial element pervaded the locality, and as a consequence there has been more frequent occasions for the exhibitions of quinine in addition to other treatment. As a consequence of the mildness of the temperature there have been remarkably few cases of insolation during the summer.

The Colleges are open again, finishing their summer courses, and are well attended by the "spring" classes, as well as by a sprinkling of first-course men, who are slowly arriving.

Most of the medical societies have resumed their meetings, and are preparing for energetic and instructive employment for the winter. Medical publishers, too, are getting ready to offer a valuable file of literature the coming season. The enterprising firm of Lindsay & Blakiston are issuing from their press an exceedingly valuable catalogue of new books and republications. Of these are just out—"Harris's Dictionary of Dental Surgery," a work which has been out of print for four or five years, and a republication of the "Biennial Retrospect of Medicine, Surgery, and their allied Sciences," for the New Sydenham Society, 1867, edited by Powers, Anstie, Holmes, and other well-known authorities. They have also nearly ready, and shortly to be issued, a work on "Epidemic Meningitis, or Cerebro-Spinal Meningitis," from the pen of Dr. Alfred Stillé, Professor of the Practice of Medicine in the University of Pennsylvania; one from the pen of Dr. J. Solis Cohen, of this city, on "Inhalation: its Therapeutics and Practice;" a new edition of "Diseases and Accidents incident to Women;" Hufeland on "Prolonging Life;" Taft's "Operative Dentistry," etc.; and they are preparing, with a great deal of care, the first volume of "Reports of Cases and Clinical Lectures," by the Medical and Surgical Staff of the Pennsylvania Hospital, with papers from the pens of Drs. Gerhard, Levick, Meigs, Da Costa, Hewson, Morton, Hunt, and Agnew. This work is to be abundantly illustrated, and to be issued about New Year, in the highest style of the art. The volume is looked for with peculiar eagerness by our city practitioners, who all feel attached to the old

institution, the memory of whose hard benches involuntarily calls the palm to the breech, and will doubtless be hailed with equal pleasure by all who have frequented the old amphitheatre.

The great event of the week has been the visit of Dr. SPENCER WELLS, the British ovariotomist, to the clinic of Jefferson College, on Saturday last, and his remarks to the class in connection with the diagnosis of an abdominal tumor which was examined by him upon the occasion. The brothers ATLEE were present with the distinguished guest, who had just witnessed an operation of ovariotomy by Dr. WASHINGTON L. ATLEE, of this city, who has performed the operation more than one hundred and sixty times. Prof. Gross, in introducing these gentlemen to his class, took care, in commenting upon the operation of ovariotomy, to allude to its American origin, and to substantiate the claims of Dr. JOHN ATLEE, of Lancaster, Pa., who was present, as the first surgeon who had ever performed the operation of removing both ovaries upon the same occasion; this patient was operated upon in 1843, and is still living.

After attending to a few urgent cases to whom promise had been made to attend to them that day, Prof. Gross yielded the balance of the hour to Dr. WELLS, who then proceeded to examine the patient, who had been provided for that purpose. This was a negro woman, æt. 43, widowed, and who had carried an abdominal tumor for fourteen years. The patient was placed in the recumbent position, with the head and shoulders elevated, the tumor being uncovered throughout its entire extent without exposure of any other part of the person. Dr. Wells stated that it was his usual plan to expose the tumor in this way and secure a good view of it, before asking any leading questions from the patient, and he thereby avoided loss of time which might be occupied in the recital of unnecessary history, and elicited information on such points only as might be pertinent to the case. It was an interesting fact in connection, that he had never met with a case of ovarian tumor in the negro, though he had seen one in a creole who had come from New Orleans and in a mulatto woman from Jamaica. This infrequency might he accounted for by the limited number of black people in the British Islands, though his friend Dr. Washington L. Atlee, of Philadelphia, who was present, and whose experience in ovarian tumors was equalled by no other American surgeon, informed him that fibroid tumors of the uterus were much more apt to be met with than ovarian tumors in the negro race. The fact of the patient being a negro would in a measure deprive him of one of his aids to diagnosis, on which he placed considerable importance. He referred to the complexion of the patient. Whenever a lady with an enlarged abdomen presented herself in his consulting apartments, the first thing he did was to notice her complexion; if this was healthy or florid he always suspected he had a tumor connected with the uterus to deal with, but if it were pallid, yellowish, or waxy, his mind instantly reverted to the probability of the tumor being ovarian. Emaciation too was more generally apt to be associated with ovarian tumors, and in the patient about to be examined there is a general appearance of health which would not lead to suspicion of the existence of serious disease were it not for the presence of the abdominal enlargement. After gaining a general idea from the appearance of the tumor in a state of rest, he then proceeded to a physical examination; and the first step is to measure the tumor by means of the tape-measure; the first measurement is taken round the body at the level of the umbilicus; the second is a vertical measurement in front, and is taken in two steps, one being from the edge of the ensiform cartilage to the umbilicus, and the other from the umbilicus to the pubic symphysis, which shows whether the tumor occupy more of the upper or more of the lower portion of the abdomen; next, an oblique measurement would be taken from each superior spinous process of the ilium to the umbilicus, demonstrating whether the tumor occupied a position more to the right or to the left, and was therefore more likely to be connected with one ovary than the other. The measurements being concluded, his next step in the examination is palpation of the tumor, to judge of the sense of resistance, of the existence of fluctuation, of the nature of such fluctuation if present, and of the size, consistence, and surrounding attachments of the tumor. If by slightly filliping the abdomen, distinct evidences of fluctuation follow, as shown by the movement of a wave of liquid beneath the integument, readily distinguished by the eye, even at a considerable distance, as occurred in the instance under examination, then he inferred that the water thus seen was not contained in a cyst, for the walls of a cyst are too firm to permit of the production of such distinct rippling, and his conclusion would be that the fluid was immediately beneath the abdominal integument, that is to say, free in the peritoneal sac, and therefore surrounding the tumor. The next step in the examination is to determine the boundaries of the tumor, and these could be marked out by pressing the walls of the abdomen in with the ends of the fingers until the edge of the tumor was felt, and then carrying the fingers around the tumor and thus determining its contour. Then succussion was performed on each side of the tumor, first with one hand and then with the other, to determine the existence of any fluid within it which would be signalled if present by the transmission through the mass of a sense of fluctuation from one hand to the other. In the instance under examination no such sense of fluctuation within the walls of the tumor could be perceived. The next thing was to lift up the tumor through the abdominal walls, to get an idea of its weight, density, and amount of attachment to surrounding structures. In the present instance the tumor could be lifted freely in every direction, showing that there were no serious attachments, and the abdominal walls could be readily lifted from the mass, and without producing any tension upon the umbilicus, showing that there were no adhesions in this direction. Then, he proceeded to pass the fingers around the edges of the tumor and under them, so as to judge of the integrity of outline of the mass; and in the present case he distinguished here and there small outgrowths of the size of a marble or walnut, particularly at the lower portion of the tumor as it approached the pelvis. The existence of these nodulations is extremely rare in cases of ovarian tumor, but they are not uncommon in fibroid tumors of the uterus. This circumstance, the fact of the patient's appearance denotive of comparative health, together with the absence of œdema of the lower extremities, would lead him to the inference that the case under examination was one of fibroid of the uterus, and not of ovariant umor. A further method of continuing the diagnosis consisted in auscultating the tumor. In fibroid tumors of the uterus there can almost always be detected a vascular murmur, sometimes much like the murmur heard through the placenta, which is not heard in ovarian tumors. Applying the stethoscope in the present instance, no such decided vascular murmur could be heard, but there was a distinct sense of propulsion communicated to the ear, and synchronous with the pulse, which was due to the transmission through the tumor of the pulsations of the abdominal aorta. A vaginal examination was then made, resulting confirmatively with the diagnosis arrived at by external examination of the tumor. This was inferred, princi-

pally because the cervix of the uterus was beyond the reach of the finger. When there exists a fibroid tumor of the uterus, the enlargement of the fundus carries the neck of the womb up out of the pelvis, and a vaginal examination, as in the present case, is apt to reveal an empty pelvis. This is not usually the case in ovarian tumor, though sometimes under such circumstances the neck may be beyond reach, but usually a portion of the ovarian tumor may be felt as a fluctuating mass between the cervix and the bladder, or between the cervix and the rectum. Still another aid to diagnosis exists in the introduction of the uterine sound. If the sound can be passed several inches into the organ, it is confirmative of enlargement of the uterus, but often when such enlargement exists, the sound cannot be introduced in consequence of the tortuousness of the canal of the cervix; and therefore the negative evidence afforded from the sound is not to be always taken into consideration as proof of non-enlargement of the uterus.

Having determined the diagnosis, the question arises as to the treatment. In a case like the present it must be palliative, upon general principles to meet indications as they call for interference. Extirpation of such a tumor is sometimes performed, but the results are eminently unfavorable. Five such operations had been performed by the lecturer, but they had terminated fatally in every instance, probably because, in some degree they were not cases favorable for surgical interference. The operation has, however, proved successful occasionally, but not as a rule. He would not, therefore, advise the removal of a fibroid tumor of the uterus unless the life of the patient were in imminent peril from impaction of the rectum or other cause, and operative interference presented the only chance of relief.

Dr. Wells then proceeded to exhibit the instruments he had devised for drawing off the contents of an ovarian cyst previous to its removal, and for securing the pedicle afterwards. He had found an inconvenience in the use of the ordinary trocar and canula from the escape of fluid between the walls of the cyst and the canula during the interval between the puncture and the withdrawal of the trocar. This he believes he avoids by the use of a hollow trocar, permitting the escape of the fluid from the very instant of puncture. The instrument presented is of large size, probably admitting the end of the finger, and protrudes beyond a canula in the shape of the nib of a large quill-pen. As soon as the instrument has been plunged into the cyst, and while the fluid has already begun to escape, the trocar can be withdrawn within the canula, avoiding the chance of subsequent injury. The canula is encircled by two semicircular, three-pronged vulsella, which are intended to seize upon the walls of the cyst, so that they can be withdrawn from the abdomen during the evacuation of their contents. To facilitate this evacuation, and to avoid the noise or other embarrassment which occasionally produces an unpleasant effect during the draining of the fluid, he has attached to his canula a long rubber tubing of large size; the tube consists of two layers of india-rubber, enclosing a spiral wire which keeps the tube pervious. His clamps for securing the pedicle consist of two stout parallel curved plates of steel, serrated on their opposing surfaces and admitting of very great compression by means of screws on the outside; they have movable handles which can be withdrawn after the pedicle has been secured, and their curved form renders the walls of the abdomen more tolerant of their pressure during the separation of the pedicle. Where the pedicle is too short to be secured in this way, he employs another instrument composed of two metallic blades shielded beneath with ivory to prevent the passage of heat to the tissues between which the pedicle is grasped, and then all that portion which protrudes beyond the instrument is seared off with the hot iron, the abdomen being protected from contact with the cautery by a vertical shield attached to one of the blades of the instrument. After all the tissue above the level of the instrument has been destroyed, the blades are gently separated to avoid tearing the attachments which have adhered to the instrument during the cauterization; as the blades are separated, any hæmorrhage that occurs is immediately controlled by ligature; and finally the pedicle is allowed to become retracted within the peritoneal cavity, and the incision in the integument is closed.

Dr. Wells stated that he had performed the operation of ovariotomy in all 228 times, and with the following result: of the first hundred cases, 66 recovered and 34 died; of the second hundred, 72 recovered and 28 died; and of the last twenty-eight cases, 24 recovered and 4 died; in all 162 recoveries and 66 deaths, or a general mortality of a little more than twenty-nine per cent. He had removed both ovaries in seven cases, four of which recovered and three died.

With regard to the mortality of the operation, Dr. Wells did not consider it greater than in other serious surgical operations, such as amputation at the hip, ligation of the iliac artery, the operation for strangulated hernia, and the like; besides which it must not be forgotten that the operation is one of recent origin, and that there is not therefore in this department of surgery that accumulation of experience which serves as a guide in other operations. He believes, too, that as surgeons become more familiar with the proper selection of cases, the mortality would gradually decrease in accordance with previous experience in the history of surgical operations; while here, as elsewhere, a certain number of operations are performed at the urgent solicitation of the patient, even against the judgment of the operator. He alluded to mistakes likely to occur in the diagnosis of ovarian tumor, embarrassments which present themselves unexpectedly during the progress of the operation, and occasionally preventing its completion; but he did not think these mistakes were more frequent than mistakes which sometimes occur in all branches of surgery, despite the exercise of the greatest care and judgment, and he instanced the circumstance of lithotomy having been occasionally performed without the discovery of a calculus, the puncturing of an aneurism instead of an abscess, as parallel cases to those in which a fibroid or other tumor has been mistaken for an ovarian cyst, and thus led to an operation which should not have been undertaken; but he firmly believed that as science advanced, these mistakes would gradually become less frequent, and be eventually expunged from the history of ovariotomy.

The above *resumé* from memory will enable your readers to judge of the practical manner in which the subject was handled, and your correspondent only regrets that he did not take notes, so as to have given a more extended report for your lecture column; but the fact is that he became so interested in the gentleman's manner that he forgot all about notes.

Yours truly,

C. J.

PHILADELPHIA, Sept. 16, 1867.

STILL ANOTHER ALKALOID OF OPIUM.—Messrs. T. and H. Smith, of London, have found a new alkaloid in opium, to which they have given the name of *Cryptopia*. These chemists, however, obtained only five ounces of the *muriate of cryptopia* from out of four tons of opium. The primary form of the crystals is a hexagonal prism. The chemical formula is as follows: $C^{33}H^{21}O^{6}N$.

A QUESTION OF PRIORITY.

To the Editor of the Medical Record.

In your issue of Sept. 1, 1867, is an article on the treatment of hip-joint disease, by Dr. Chas. F. Taylor, which contains a sentence which deserves a comment. Dr. Taylor says, "In 1860, before I had ever treated a case of hip-disease, my attention was called to the subject, in consequence of the discussions going on at the time. I then devised the short instrument, which has since, for some unaccountable reason, been labelled with Dr. Lewis A. Sayre's name."

This gentleman made the same charge in the *American Medical Times*, of July 20, 1861, and which I corrected in the following number, of July 27, 1861, by the letter of Dr. Erskine Mason, stating that I had used the short splint in Bellevue Hospital in Sept., 1860, up to which time Dr. Taylor now states in his last paper he had never treated a case of hip-disease.

Why he repeats this error, which he has once admitted and apologized for, I leave for himself to explain.

The following is from the *American Medical Times* of July 27, 1861, and speaks for itself:

"Correction.

"*To the Editor of the American Medical Times:*

"795 Broadway, New York, July 24, 1861.

"Sir—In your issue of July 20th, in an article on 'Improved Splint for counter-extension in Morbus Coxarius, by Dr. Charles F. Taylor,' in which he states that he constructed an instrument in the latter part of last year, with a branch passing from the external splint over just above the knee, to the inside of the thigh, etc., and in the concluding paragraph of his article, after claiming various improvements, etc., says: 'I am forced to do this from the fact that the *Medical Times*, in its issue of June 29th, had an instrument figured as the improvement of Dr. Sayre, which the reader cannot have failed to notice, is, so far as the contrivance for receiving the adhesive strap from the inside of the thigh, substantially identical with the one here described. This improvement was first shown by me to Dr. Sayre after I had used it several months, and he has adopted it without giving me proper credit.'

"Dr. Taylor first showed me his instrument about the 1st of February, 1861, whereas it will be observed, by the following correspondence, that my instrument was exhibited at Bellevue Hospital at the time of my lecture on Hip-Disease, in December, 1860, and I had constructed it some time previous, at the suggestion of Dr. Mason.

"As the lecture was not published until June 29, 1861, it is possible that Dr. Taylor fell into his error by not observing the date of its delivery.*

"I called upon Dr. Taylor as soon as I had read his article, knowing that he would correct the error, as soon as it was explained to him, but finding him absent from the city, and that he would not return for some weeks, I have deemed it but justice to myself to correct this false statement.

"'795 Broadway, July 22, 1861.

"'Dr. Mason, House Surgeon, Bellevue Hospital:

"'Dear Sir—Will you be kind enough to give me the date of the case of Morbus Coxarius, in Dr. Crane's wards, and for which you suggested to me to alter my instrument so as to make extension from above the knee only, and also the date of my lecture on that subject, in which I exhibited the improved instrument.

"'Respectfully yours, etc.,

"'Lewis A. Sayre.'

"'Bellevue Hospital, July 23, 1861.

"'Dr. Sayre: *Dear Sir*—The time I first made the suggestion to you to make the extension from above the knee in your apparatus, for the treatment of hip-disease, was about the middle of September, 1860.

"'The apparatus, thus modified, you showed to your class at Bellevue Hospital the middle of December, 1860.

"'Yours respectfully,

"'Erskine Mason,

"'House Surgeon.'

"Further comment is unnecessary.

"You will oblige me by giving this an insertion in your next issue.

"Respectfully, your obedient servant,

"Lewis A. Sayre."

Some weeks after the publication of this correction, Dr. Taylor, on his return to the city, called at my office, and apologized for the error, and regretting the injustice he had done me, promised to publish a correction.

For some reason or another this promise has obviously never been fulfilled.

By reference to the dates, in the two articles of Dr. Taylor, in one of which he states that he constructed his instrument in the latter part of 1860; and in the other that *he had used it several months* before he showed it to me, would certainly place the time of my seeing his instrument some months after January, at which time, as will be seen by the note of the Editor of the *Medical Times* my lecture was in the hands of the printer, and the instrument had been used some months before.

Yours respectfully,

Lewis A. Sayre, M.D.

285 Fifth Avenue, New York, Sept. 5, 1867.

* It is but proper that we should state that the lecture of Dr. Sayre has been in our possession since the early part of January, and that its publication was delayed by a pressure of matter.—*Ed. Amer. Med. Times.*

ACTIVE VENTILATION.

A new method.

To the Editor of the Medical Record.

Sir—On a close morning, an apartment where several persons have slept may be opened to the fullest extent of all the windows and doors, and yet so slow is the atmospheric diffusion that, on entering such a room several hours later, you would at once say "this air is unfit for respiration."

Wind-sails are often of great service in driving out the stagnant air from between the decks of vessels, but these are as dependent upon the wind as are the vessels themselves, but in the exceedingly simple method which I am about to propose we actually *raise the wind* by which we effect the good result.

It is by *gently swinging all the doors back and forth upon their hinges.* The thoroughness of this method may be demonstrated by placing a feather in a distant part of the room, and if you please, under or behind some piece of furniture where you would least expect it to feel the influence of your fan; after one minute's effort, look for the feather. Again, shut all the doors but one, and as you move that one observe that the distant windows of the apartment "rattle," and the curtains *swing* synchronously with your own efforts. This method of ventilation seems especially valuable for all sleeping rooms, for tenement-houses, basements, clothes presses, closets, or any other places where the atmosphere is not readily changed by draughts or currents. Its

advantages are too obvious for serious argument, but the process is so exceedingly simple that it will be neglected and forgotten. Were it some great thing, attended with parade and expense, we might hope for its general adoption. But for this consideration I would hardly say of my own thought that I regard it as an important practical hygienic suggestion which *ought* to increase the longevity of our race. The idea may have occurred to others —'twere strange if it has not—but I would make it the property of every man, the custom of every family, a blessing to every age.

Truly yours, J. H. HOBART BURGE, M.D.

60 COURT STREET, BROOKLYN, N.Y.

New Publications.

BOOKS AND PAMPHLETS RECEIVED.

A DICTIONARY of Medical Terminology, DENTAL Surgery and the COLLATERAL SCIENCES, by CHAPIN A. HARRIS, M.D., D.D.S., Prof. of the Principles of Dental Surgery in the Baltimore College, etc., etc. Third edition carefully revised and enlarged by FERDINAND J. S. GORGAS, M.D. D.D.S., Prof. of Dental Surgery, Baltimore College. Philadelphia. Lindsay & Blakiston, 1867.

A BIENNIAL RETROSPECT OF MEDICINE, SURGERY, AND THEIR ALLIED SCIENCES, edited by MR. H. POWER, DR. ANSTIE, MR. HOLMES, MR. THOMAS WINDSOR, DR. BARNES and DR. C. HILTON FAGGE, for the New Sydenham Society. Philadelphia: Lindsay & Blakiston, 1867.

IS IT I? A Book for every man. By HORATIO R. STORER, M. D., of Boston, Vice-President of the American Medical Association. Boston: Lee & Shepard, 1867.

Medical Items and News.

DR. H. KNAPP, PROFESSOR OF OPHTHALMOLOGY in the University of Heidelberg, is now on a visit to this country. He is one of the well-known authorities on eye disease in Germany, and strangely enough, expresses the same opinion concerning the facilities for medical study in this country as does Spencer Wells, quoted in another place. We take pleasure in stating that the distinguished professor intends at some future time to give us a practical article for our columns, on a subject connected with his specialty.

DR. B. A. CLEMENTS, Surgeon, U. S. A., according to the official accounts, is slowly recovering from an attack of yellow fever, contracted in the line of duty at New Orleans, La.

DEATH OF PROF. ROBERT WATTS.—At the moment of going to press we are informed of the death of our cherished friend, Dr. Robert Watts, Professor of Anatomy in the College of Physicians and Surgeons, in this city. This event, which we announce with no ordinary feelings of sorrow, occurred at Paris, France, on the 8th ultimo. An obituary notice of the deceased will appear in our next issue.

DEATHS AMONG U. S. A. SURGEONS IN THE LINE OF DUTY.—Nine surgeons in the United States service have died during the past month in the cholera and yellow fever localities of the West and Southwest. This is more than the usual mortality in that branch of the service for an entire year.

A NEW PARISIAN SENSATION.—Paris is just now in the enjoyment of a new sensation in the person of the Zouave JACOB (trombone-player), who *cures* the paralytic, the blind, and the bed-ridden generally, by a few energetically spoken phrases. He comes to Paris late in the afternoon, after giving a sitting of consultations at Versailles. The most remarkable part of the miracles wrought by him is the circumstance that he receives no fees, and cures without even the pretence of infinitesimal doses. JACOB is a general practitioner, and claims to be equally at home in every department of medicine.

THE MOTHER THE BEST NURSE.—The authorities at Munich for some years past have required that in all cases of children dying in their first year, the parents should declare whether or not the infant had been suckled by the mother. A statistical table of the last two years shows that out of 100 deceased 88 were not so brought up.

MORTALITY FROM SCARLATINA IN ENGLAND.—The average amount of scarlet fever that constantly exists in England may be estimated from the fact that in the twenty-one years from 1838–42, and 1847–62, the deaths numbered 910,720, or 14,796 annually. In fact scarlet fever is nearly as fatal as the entire class of fevers summed up by the Registrar-General under the generic term "typhus." In 1863 the total deaths from scarlet fever were 30,475, or 148 per 100,000 population. The annual average death-rate from this malady in London during the twenty-six years ending 1862 was 83 per 100,000 population. The mortality ranged from 32 in 1841 to 174 in 1863. In the quinquennium, 1839–43, the yearly average was 78; in that of 1844–48, it rose to 88; in that of 1859–63 it increased to 115; the death-rate of 1863 being 174, or more than double the average of the twenty-six years, 1838–64.

The census of 1860 shows that the total number of deaths from scarlatina in the United States in that year was 26,393.

NEW YORK MEDICO-LEGAL SOCIETY.—This society is now in active operation, and we shall endeavor from time to time to keep our readers informed of its doings. Dr. Wooster Beach, Jr., is the President, and Dr. Leo is the Secretary.

THE TRAFFIC IN COCCULUS INDICUS.—50,000 pounds of cocculus indicus were imported from India to England last year—a sufficient quantity to drug 120,000 tons of beer.

SULPHATE OF SODA AS A REMEDY FOR MACULÆ OF THE CORNEA.—Dr. De Luca reports to the French Academy of Sciences that sulphate of soda, which has the property of maintaining the fibrin of the blood in a fluid state, may be used with success in removing these spots. The best method of using it is to reduce the salt to a fine powder, and drop a pinch of it into the eye of the patient while in a horizontal posture—the salt is soon dissolved in the liquids of the eye.

BEER VERSUS BREAD.—The amount of nutriment contained in beer is generally greatly over-estimated. Leibig asserts that in 1,460 quarts of the best Bavarian beer there is exactly the nourishment of an ordinary two and a half pound loaf of bread. This beer is about on a par with our best American beer. Instead of being a condensation of the nutriment contained in the grain in just so far as the liquid has undergone fermentation the nourishment has disappeared.

SUPPORT MEDICAL JOURNALS.—No man can fulfil the mission of a doctor unless he takes a good medical journal, and it is useless to cry poverty. The best investment a practitioner can make—one that insures him bread, meat and clothes—is not six, but fifty dollars' worth of good medical journals. If a man practises without this sort of communion with his brethren throughout the world he deserves to be poor. Surely the community in which he lives has a right to keep him so.—*Southern Journal Medical Science.*

Original Communications.

CASES OF ORGANIC AND REFLEX PARALYSIS

TREATED BY ELECTRICITY.

By A. D. ROCKWELL, M.D.,
AND
GEO. M. BEARD, M.D.,
LECTURER ON NERVOUS DISEASES IN THE UNIVERSITY MEDICAL COLLEGE OF NEW YORK.

I.

In all the eras of medical history the treatment of the various forms of paralysis has been at once the opprobrium of science and the glory of empiricism. It is more eminently true of this disease than of almost any other with which humanity suffers, that while there are thousands of cases that defy the combined skill and experience of the faculty, there is yet no system of treatment so fantastic and absurd as not to be able in certain instances to perform absolute and apparently marvellous cures. There are few practitioners of large experience who have not known of cases of paralysis that have been to all human seeming permanently restored by practices that are abhorrent to science and reason, and that, too, at the hands of those who were as ignorant of the rationale of their own treatment as they were of the pathology of the disease. The causes of this discrepancy between the experience of science and charlatanism are not difficult of explanation.

1st. The obscure pathology of the different forms of paralysis.

The causation and nature of most of the diseases of the nervous system are even yet environed by darkness rather than by light, notwithstanding the faithful labors and brilliant discoveries of a host of able microscopists and pathologists. Prior to the last half century, all that was known to the profession of the pathology of paralytic affections was too vague and erroneous to be any guide either in diagnosis or therapeutics; and even in our day, in spite of the splendid researches of Romberg, Trousseau, Leroy d'Etiolles, Duchenne, Flourens, and Brown-Séquard, there are comparatively few among general practitioners who even attempt a systematic diagnosis between paralysis dependent on myelitis or other organic affections of the central nervous system, and those which are due to reflex action or to anæmia. This question of differential diagnosis that presents itself with every case of paraplegia, and is of such vital moment both for the prognosis and therapeutics, is either not raised at all or is answered without logical investigation or reflection. The direct and inevitable consequence of this uncertain pathology is primarily to make the treatment of paralysis almost entirely empirical, and ultimately to throw discredit on all measures of active interference, even in cases that proper investigation would show to be entirely curable.

Charlatans have busily occupied the field thus left open by the ignorance and discouragement of science, and have oftentimes surprised themselves and their patients by speedy and astonishing results.

2d. The helplessness and suffering caused by paralysis, and the lingering character of many of its phases, beget the desire and the opportunity on the part of the patient to test many styles of practice that are repugnant to sense or philosophy.

A patient who is stricken down in the prime of manhood by this mysterious chronic disorder, and who (as is so often the case) is counselled by his family physician to wait for nature and time, can hardly be censured for grasping at anything that offers the faintest hope of relief. We cannot wonder that such unfortunates are ready to *sow* beside all waters, even though they find neither satisfaction nor reward.

3d. The very recklessness, ignorance, and greediness of quacks have driven them to successful experiments that the conscientious and honorable would hardly dare attempt.

The spirit of Paracelsus and Sir John Long still lives, and amid a thousand blunderings it now and then stumbles on some path that leads to usefulness.

We would not be understood as underrating the systematic and patient investigations of a number of able minds, who for the past few years have labored specially in this department, and have contributed so much that is of practical service in the treatment of paralysis as well as in the study of its pathology. Chiefly among these recent observers is C. E. Brown-Séquard,* whose writings on diseases of the nervous system, for originality and boldness of thought, and for clearness and compactness of style, have few equals in scientific literature. But the conclusions at which he arrives, and which he so lucidly presents, are, to say the least, not indisputable. The variety of facts that he has collated are indeed of immense service to the student of diseases of the nervous system, as a guide by which to estimate observations that shall be made by future experimenters; though it may well be questioned whether all his brilliant generalizations will stand the test of the combined experience of the explorers that are to come.

His leading ideas in regard to the pathology of paraplegia, are clearly set forth in the following propositions:

1st. That there is a form of paralysis of the lower limbs, entirely distinct from all others, as proved by its mode of production, by morbid anatomy, by its symptoms, and by the influence of a certain mode of treatment; and that this form of paralysis fully deserves the name of reflex paraplegia.

2d. That the reflex paraplegia may be caused by the most various irritations of the skin, the mucous and serous membranes, the abdominal or thoracic viscera, as well as of the genital organs, or the trunk of the spinal nerves.

3d. That most cases of paraplegia can be placed in two groups, entirely different one from the other, according to the existence or the absence of symptoms of irritation of the motor, sensitive, and vaso-motor nerve fibres.

4th. That most of the therapeutical means to be employed in paraplegia are also to be grouped in two categories, one of which is fitted to those cases in which there are symptoms of irritation, and the other to those cases in which these symptoms do not exist.†

The "therapeutical means" referred to in the last proposition are as follows:

In reflex paralysis.—1st. Means of diminishing the external irritation that causes the paraplegia—viz., local applications of belladonna, or of opium, or of both combined. 2d. Means of improving the nutrition of the spinal cord—viz., strychnine, sulphuret of potash, sleeping on the back with the head and legs elevated, applications of cold and heat to the spine, revulsives, "galvanism." 3d. Means of preventing the ill effects of rest in the paralyzed nerves and muscles—viz., "galvanism" and shampooing.

Paralysis due to myelitis, or to some congestive or in-

* Course of Lectures on the Physiology and Pathology of the Central Nervous System.

† Lectures on Paralysis of Lower Extremities, p. 118.

flammatory condition of the spinal cord or its membranes. —1st. Means for diminishing the congestion of the spinal cord—viz., sleeping with the arms and legs on a lower level than the spine, hot and cold applications, dry cupping, revulsives, belladonna and ergot of rye. 2d. Means to prevent the formation of sloughs, or to cure them when formed, and to prevent other alterations of nutrition in the paralyzed parts—viz., pounded ice and poultices, shampooing, warm foot-baths, the flesh-brush and galvanism, remedies for any nephritis or cystitis that may occur, laxatives for the bowels. 3d. Tonics—cod-liver oil, iron, ale, and nutritious food.*

We have been thus minute in presenting the teachings of Brown-Séquard for the following reasons:

1st. Because, whatever exceptions may be taken to his generalizations, he is indisputably and justly regarded as one of our highest authorities on the diseases of which he treats. The relative position that has been thus accorded to him, in this country at least, has been mainly due to the fact that his opinions on these somewhat abstruse subjects, whether firmly grounded or not, are stated with a clearness, a positiveness, and an authority that can but command attention. 2d. Because, in our view (although, as will be explained further on, we are not prepared to endorse all of his statements in regard to reflex paralysis), his system of therapeutics for *all* relievable paralytic affections, is at once catholic, scientific, and comprehensive, since it is based on a differential pathological diagnosis, and practically includes the best results of daring quackery—the movement cure, rubbing, and galvanism—as well as the judicious administration of remedies. 3d. Because, as we shall endeavor to show by theory, by general experience, and more especially by detailed exhibition of cases, these indications for the treatment of the nervous forms of curable paralysis are more fully met by general electrization † with the faradaic current in conjunction with localized electrization—either with the faradaic, or, in some cases, with the galvanic current—than by any other one system that has yet been proposed.

In regard to general electrization with the faradaic current, we speak only from our own experiments on ourselves and on the living subject, and from a considerable experience with a variety of diseases, since we were the first to call the attention of the profession to this method of treatment.

So far as merely localized electrization with the faradaic or galvanic current is concerned, our experience was in the main anticipated, and has been corroborated by Duchenne, Tripier, and Seiler in France; by Profs. Remak and Ziemssen, and by Drs. Rosenthal, Meyer, Benedict, Erdman, and Bastings in Germany; by Dr. Althaus of London, and by Drs. Garratt, Weir, Mitchell, and W. A. Hammond of our own country. We claim that *general electrization with the faradaic current* is a *general tonic* and corrective of very great efficacy, and that as such it fulfils the following specific indications:

1st. To strengthen and soothe irritable and painful nerves or organs.

2d. To prevent atrophy and fatty degeneration that may result from too long disuse of paralyzed nerves and muscles.

3d. To equalize the circulation; to bring the blood to cold parts, and *vice versa*, to diminish congestion.

4th. To prevent the formation of ulcers in paralyzed parts, and to hasten their cure when formed.

5th. To produce general tonic effects in the whole system, by correcting the deranged organs of assimilation, and stimulating all the various processes of waste and repair. These constitutional tonic effects of general electrization are demonstrated in the same manner, as from the internal administration of tonics—travelling, sea-bathing, riding—viz., by increase of appetite, making the sleep more refreshing, relieving nervous and inflammatory pains, regulating the bowels, improving the circulation, the color of the cheeks, the muscular development, and the *tout ensemble* of the individual.

For proof of these statements we refer to our treatise already published, and to the details of cases that are to accompany these articles. The power of electrization (whether with the galvanic or faradaic current) to soothe irritated and painful nerves or organs, is so very easy of demonstration, that we wonder that it is not more generally appreciated by the profession. Acute neuralgias are often instantaneously relieved by the application of a fine current, directly over and along the painful nerves. For aching eyes and irritable throats and urethras, no anodyne is at once so efficacious and so harmless. The harmlessness of electrization, used in this way, gives it in many cases a manifest advantage over hypodermic injections, or the internal use of opiates.

Were electrization only useful in neuralgia, it would deserve far more attention from men of science than it has yet received.

It will be observed that the effects here claimed for electrization are substantially those that, according to the theories of Brown-Séquard, are desired in the various forms of paralysis. That the most important indication of all, viz., the equalization of the circulation, is excellently met by electrization, we have repeatedly and daily demonstrated in our own practice and on our own persons, and in the presence of various members of the medical profession.

If the bulb of a thermometer be applied to a limb, in which the circulation is normal, or is deficient, just before and just after electrization, it will be found that there is oftentimes a very perceptible rise in the temperature; and *vice versa*, electrization of inflamed joints or other parts, reduces the temperature, dissipates the redness, relieves the pain, and diminishes the swelling, thus ameliorating all the symptoms of inflammation.

This last effect is best secured by a very fine induced current, gently applied with the moistened hand.

Although electrization in active inflammation is contrary to most of the teachings of the past, yet this is only another evidence of the irresistible tendency of the human mind to accept the dictate of leadership without doubt or question. The antiphlogistic effects of general electrization are much more decided than when the applications are merely local, for the reason that, by the former method, the great sympathetic and the entire system are affected, and then react on the diseased part. We are continually demonstrating the antiphlogistic effects of electrization in inflammations of the conjunctiva, the nasal passages, pharynx, larynx, bronchi, the urethra (the acute and passive stages of gonorrhœa), and in inflamed joints.

Now, although the bone is comparatively a poor conductor, yet the articulations of the spinal column will not wholly prevent the influence of the electric current; but the cord is, probably, chiefly affected by the impression it receives from the electrized periphery.

If injurious irritation of sensitive nerves operate directly on the central nervous system, as rightly claimed by Brown-Séquard, then certainly there is a fair probability that tonic and corrective impressions of the periphery may operate favorably upon the same system. This question will be discussed more in detail further on.

In this connection it may be well to state that all

* Lectures on Paralysis of Lower Extremities, *passim*.

† For explanation of this and other terms employed in electro-therapeutics, the reader is referred to our recently published treatise on the Medical Use of Electricity.

the results that we have here or elsewhere claimed for general electrization, can be secured in all their fulness and variety by any or all who will bring to the investigation the requisite energy, enthusiasm, patience, and earnest love of truth. It is, perhaps, too much to be expected that our older practitioners will find it possible, amid their heavy responsibilities, to pursue a department that demands so much time and special experience as the scientific study of electro-therapeutics; but for younger men, who have health and opportunity, the field thus opened for the energetic and persevering is too rich in promise of usefulness to be any longer passed by. Since we first formally called the attention of the profession to the tonic effects of general electrization with the faradaic current, we have been gratified to learn that others in different parts of the country have commenced to experiment with this method of treatment, and some of these have already met with sufficient success to more than corroborate all that has been claimed for it.

914 BROADWAY.

ON THE PREVENTION AND TREATMENT OF SCARLATINA.

BY N. L. NORTH, M.D.,

BROOKLYN, N. Y.

I WAS greatly pleased on reading in the last number of the *N. Y. Medical Journal* an article by Dr. C. C. Lee, "On the Internal Use of Chlorine Water in Anginose Scarlatina," as it so exactly accords with my own experience of the last few years, as also with the recorded experience of so many English physicians for the past five or ten years, as may be seen by looking over the files of Braithwaite for the time. Mr. E. J. Blyth, in 1863, and again in 1864, particularly calls the attention of the profession to this treatment in the following language: "Let me urge my medical brethren to give a full and fair trial to my remedy, relying implicitly on it. . . . . I see no reason why every one using this remedy fully, should not be blessed with the same success that I have been, during many years that I have used this specific in an active and extensive practice."

The formula given by Mr. Blyth is (except that there are ten instead of eight grs. of chlorate of potash) the same as that given by Dr. Lee, and the same also as may be found in "Watson's Practice of Physic." In fact the remedy is not a new one, or not an uncommon one, and yet I believe it might with great good effect be more *widely* known and more *generally* used. Any practitioner who will try the remedy need not long be in doubt as to its great value in anginose scarlatina. I myself had the honor, in August or September, 1864, of reading a paper on scarlatina before the "Medical Association of the E. D. of Brooklyn," wherein I particularly urged upon my medical brethren the use of the hyposulphite of soda as a prophylactic, and as a general remedy in scarlatina, and the "*chlorine mixture*" in the anginose or diphtheritic variety. I also give it and urge its use in pure diphtheria as a remedy of far greater power than any other I have ever used. I speak of the remedy as a "chlorine mixture," for it is evidently *not* a simple "chlorine water," but a mixture of pure chlorine with the chloric and hydrochloric acids, and is to most people pleasant to the taste, while the "chlorine water" of the Pharmacopœia is *very* disagreeable to the taste, and, according to my experience, of far less value in scarlatina anginosa or diphtheria, than the chlorine mixture which I have prepared as follows:

Put ten grains of the chlorate of potash, finely levigated, in a pint bottle; cork it; add one drachm of hydrochloric acid; in a minute or so add an ounce of water, and shake; to dissolve the vapor, let it stand a short time; then add more and more water at intervals until the bottle is filled.

I direct my apothecaries to be in *no haste* in the preparation of the mixture, but to prepare it beforehand, and add the water ounce by ounce, and allow sufficient time between each addition for the absorption of the vapor or gases. I find physicians are in the habit of using chlorate of potash and hydrochloric acid with water—writing extemporaneous prescriptions therefor—in very much larger quantities of the acid and potas. chlor., yet with nothing like the effect; and I have again and again surprised them with the strength and efficiency of my chlorine mixture made after the formula of Dr. Blyth above given. I find it again very necessary to *know* my apothecary; as, with our *model* arrangement of *learned* apothecaries, I find it very difficult to "*beat it into the head*" of more than about one in fifty that the *manner* of compounding medicines is, many times, of as much importance as the *matter* of which they are compounded.

As to the dose of the chlorine mixture, I give, according to the age and condition of the patient, from a teaspoonful to two tablespoonfuls, diluted with pure water, at intervals of from one to eight hours. Much larger doses may, and have been given, but I find these doses large enough, and much prefer giving small quantities frequently, to larger doses at longer intervals; as it seems to me its action is more antiseptic and disinfectant than otherwise, and the more *continuous* its application to the seat of the disease, the better for the patient.

The *N. Y. Medical Journal* published a short communication from myself, in March, 1866, in which I advocated the use as prophylactic for, as well as a remedy in, scarlet fever, of hyposulphite of soda, and the chlorine mixture in the anginose variety. Dr Blyth recommends the chlorine mixture alone for the same purpose. I wish here to add to what I said in the communication mentioned, that I still believe the hyposulphite of soda to be a prophylactic of more power than anything ever yet used, and that its apparent failure is explainable in the fact that the profession is looking for some specific (as vaccination for small-pox) for scarlatina, and have given this medicine, as they have others, with that idea uppermost. Now if the ground be taken that the medicine acts as an antiseptic and disinfectant, we shall not give it for a few days, and think we have obtained its preventive effect upon the system, but we shall administer it to the well children as a prophylactic during the *whole time* of their exposure.

In March, 1867, the Metropolitan Board of Health (so the newspapers informed us) passed a resolution including *scarlet-fever*, measles, diphtheria, etc., in their category of "contagious diseases." I did hope at the time that some recommendation might emanate from, or that some order would be issued by the Honorable Board, requiring the systematic use of disinfectants and prophylactics in these diseases, if any could be sufficiently relied upon to warrant a trial; but I was doomed to disappointment, as I heard nothing more of the resolution until *June* (about the time it usually takes, by the way, for a resolution or order of the Metropolitan Board of Health to be promulgated, or carried into effect in this far-off region of the Eastern District of Brooklyn), when I was officially informed that said resolution had been passed. That official document also contained the following: "Physicians, when reporting cases of contagious diseases, are requested to state whether any action on the part of the Board of Health is needed in consequence

of the condition or surroundings of the patient." I, for one, did not know what they meant, as they had not stated what action they proposed to take in such cases; and I was glad to find in the report of the proceedings of the "East River Medical Association" that that society had appointed a committee to inquire of the Board of Health what they did mean, or what they proposed to do. Yet I was again disappointed in the answer; as I had hoped, as I before stated, that some definite action would be taken which would result in some useful statistics. I desire to add one word in regard to the use of the chlorine mixture and the hyposulphite of soda, particularly in scarlatina and diphtheria. It seems to me these medicines should not be depended upon to the *exclusion* of tonics, iron, etc.; for if they act only as antiseptic, and if they are curative only through removing or destroying the poison which is the cause of, and which is generated by the disease, and if either or both to any extent act as a prophylactic, by destroying the communicated poison previous to its development of the disease in the exposed person, then of course in actual disease the necessity of toning up the system and striving to repair the damage done, should by no means be lost sight of. I have, for instance, given the chlorine mixture in severe cases of diphtheria, and destroyed the whole of a bad membrane in from twenty-four to forty-eight hours, and in twelve hours more have found my patient as bad as at the first, and of course thought it necessary to redouble my efforts to cure. I have again, in just as severe cases, given the mixture, and immediately followed by, or alternated with, the tr. ferri sesquichloridi, and other tonics, and have had the satisfaction, not only of seeing the fauces clear up and resume the healthy state, but find the whole system of my patient rallying to a normal state, and thus preventing a return of the diseased condition.

BROOKLYN, N. Y., September, 17, 1867.

Original Lectures.

ON YELLOW FEVER.

DELIVERED SEPT. 23, 1867, AT BELLEVUE HOSPITAL, N. Y.

BY WARREN STONE, M.D.,

PROFESSOR OF SURGERY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF LOUISIANA, ETC.

YELLOW FEVER is a disease which everybody seems to understand, yet few agree upon its exact nature and character. It is a disease simply peculiar to the South, to certain warm regions. The exact laws that govern it we have not been able to define. Many observations have been made as to the temperature necessary to the existence of this disease, and certain theories have been in favor for a length of time; but all arbitrary rules have been set aside, examples having occurred to falsify them. Yellow fever is simply and purely a disease that can exist only in warm climates. It is induced by a peculiar poison, totally intangible, and distinct from any of the known causes of disease. There is no combination of filth—no combination of circumstances, calculated to deteriorate health and excite typhus or typhoid, or fevers of a low grade, that have anything to do with the generation of this disease. This is a remarkable fact, not generally understood; the filth of cities does not generate yellow fever, though it has the same influence upon it as upon other diseases, by impairing the vigor of the system, and rendering it more susceptible to morbid agents—but that is all. Sanitary measures are important, and I would not say anything to deter people from insisting on cleanliness in cities; but some Federal officers took credit to themselves for keeping yellow fever out of New Orleans during its occupation. It is a notorious fact that the city was not cleaner than usual during that time, but the conditions were more favorable; the weather was cooler and pleasanter, and there was less rain than usual. The principal thoroughfares may have been a little more clean, but the suburbs and surroundings were as fruitful sources of disease as ever. There was no material difference. We had had six successive years of exemption in other times, and that when there was no quarantine whatever. The fever fixes upon the healthiest locations with as much virulence as upon the low regions. Back on the Magnolia Ridges, looked upon as the most healthful region on the earth, it has prevailed with great severity. Indeed, it is generally more destructive in the country, when it occurs there, than in cities. But the character of the disease has been sufficiently written upon, and I will confine myself to a few points in dispute.

I. As to its etiology. There is great dispute upon a subject one would suppose might be reduced to a matter of fact, viz.: whether it is imported or of local origin. The epidemic influence is certainly not imported in ships; it is wafted through the atmosphere and takes a wide range, confining itself to no little narrow place. It seems as if it came in one grand wave, and went round in cycles. We have exemption for several years. It generally appears first on the islands and in the ports of the Gulf. If it is late in the season we do not get it in New Orleans that year, but next year that atmosphere or influence reaches us with a good deal of certainty. In 1851 it commenced in Brazil and on the Rio, and progressed regularly northward, taking the West India islands in 1852, and reaching New Orleans in 1853, when it was of the same character, virulence, and severity that characterized it in the places it had previously visited. It ran from one city to another, and along the Atlantic ports for several years. In 1855 it reached Memphis, and many of the interior towns suffered severely. This year its history is worth noticing. We had had in New Orleans sporadic cases, with evidently no intensity of the poison. This was early in June. When an epidemic has visited New Orleans it has generally appeared at two points, above and below the city, where shipping mostly lay, and where there was the greatest congregation of subjects calculated to take the disease, owing to bad living and want of ventilation and proper dormitories. It usually starts from the river and goes backward, attacking all who are in the vicinity. This year it did not begin thus; but cases occurred here and there irregularly in all sections of the city, not being intense enough anywhere to affect all who were exposed. At the same time, the weather was such as favors the development of yellow fever—frequent rains followed by a hot sun. These rains frequently occurred two or three times a day—not sweeping rains, but enough to keep everything damp, so that one's boots became mouldy while he was asleep at night. This weather lasted the whole of June and July, yet the fever did not increase at all, and everybody felt, therefore, that there would be no epidemic; for I should remark another thing: when yellow fever once commences as an epidemic, it goes on by a regular grade,—one case to-day, two to-morrow, four the next day, and so on until it reaches its height, and then it declines pretty much in the same ratio. This year, up to the time I am speaking of, there had been nothing of the kind; but after this state of things had continued some time, yellow fever appeared on the Gulf coast, coming from the direction of Mexico. The disease was evi-

dently of a more severe character, and I remarked to some one that there was an epidemic influence which I was pretty sure would reach us. The fever seized on Indianola, Texas, and, taking other towns on its way, broke out at length in great severity in New Iberia, a village about a hundred miles west of New Orleans. It was the more severe there because there had been an accession to the population, in consequence of recent drowning out by overflows.

Just a day or two before I came away the fever had reached New Orleans; and though the weather was unfavorable to the disease, it nevertheless increased steadily from nine cases a week to as many in a single day. It is fair, therefore, to infer that the epidemic which started in Texas, on the Gulf coast, swept on and reached us, and really was the epidemic we are now suffering from. This is the general character of the disease, though occasionally it will fix upon a place, run its course, and not extend further; but that is not usual. It seems to be some influence like influenza, which sweeps along, affecting almost every one within its reach.

II. The question of the contagiousness of yellow fever is an important one, and ought to be settled. It was entirely conceded that it was non-contagious until 1853, when the disease swept over the land with such violence that everybody thought they could see how it was carried. Medical men differ upon the subject; but it is important to decide the question, for many reasons, especially with regard to quarantine, and to the suffering persons themselves. Under the view that it is contagious, those who are seized are liable to be neglected by all but their nearest relatives, and even they attend them with reluctance. I am perfectly convinced, beyond all doubt or hesitation, that personally it is not contagious. I *know* that it is not. Whatever is contagious ought to be tangible; there ought not to be any dispute about it. A disease that is contagious once is always contagious. Yellow fever is the same thing in every place where it occurs; it is a specific disease, and the same subject has it but once, and does not lose his acclimation, no matter where he goes or how long he remains away; but there are some traditional points of belief on this subject, and the human understanding is very hard to convince in such cases. We have, however, abundant opportunities of proving that persons never lose their acclimation, and never have the disease but once. There are of course occasional exceptions to this rule, as to all others. Small-pox is said to occur a second time, though I have never seen it myself. If yellow fever is contagious, as contagionists contend, it should be extremely so, so that there could be no doubt of it. They cite far-fetched instances in proof of its contagiousness, but isolated cases prove nothing. I have witnessed the disease on a large scale, and could not have failed to observe it. I do not claim to have been a close observer; but I have been an honest one, and have endeavored to avoid theorizing. It is too common to form an opinion or theory, and then hunt for facts to verify it. I endeavored to have no opinion beyond what was to be inferred from the facts before me. The first opportunities I had were in the Charity Hospital of New Orleans, in my first season there, in 1833. I had arrived after being shipwrecked, and having lost almost everything. I found it difficult to get any place. I was merely assistant in the Charity Hospital. The epidemic was very severe for the number of the population. The fever commenced in the usual manner, toward the river, and spread backward gradually, street by street. The Charity Hospital was then back on the confines of the swamp. You could shoot duck from the walls. The fever did not really prevail there. The poor inhabitants, living in little cheap houses in the vicinity of the hospital, escaped the yellow fever, and none except the male portion, who worked in other parts of the city, were affected by the disease. This I was aware of from having attended them personally. It would appear that the hospital itself was not the seat of this poisonous influence. The hospital, therefore, and those who stayed in the hospital, were more exempt from fever than those outside. The hospital became crowded, because there were so many strangers in the city who had no friends, that the directors gave orders to receive all who came. The accommodation was inadequate. The servants were sick, and none could be hired. The consequence was that the hospital became filthy; the passages were often filled up with bedsacks covered with excrement, black vomit, etc. So much of this filth accumulated that it generated a low house fever of a peculiar character, something like jail fever, the patient having a dry black tongue, with sordes on the teeth, and falling into a dull lethargic condition, from which, however, they recovered rapidly under the use of stimulants. People, therefore, actually became sick from the filth of yellow fever, and escaped yellow fever itself, simply because the hospital was situated at a point where the atmospheric influence did not prevail. I was there all the time, and did not take the fever until the 28th September. I was with the fever; I dissected everything (I handled the corpses, and had lifted out ten bodies the day I was taken) in order to discover if possible some facts that would suggest proper remedies, for the disease was treated abdominably. In 1853 three hundred cases of yellow fever were treated, in the Charity Hospital and in my infirmary back of the city, by some ten or twelve sisters of charity, all of whom were unacclimated. Yet these sisters were the last persons in the house to take the fever, simply because the atmospheric influence did not prevail there. In 1847 I had two young men as assistant house surgeons in the hospital with yellow fever, and they were the two last cases that took the disease, though they had been over it all the time. At the time they took it there were no other cases in the hospital. In 1853 and 1854 there was one nurse in the Charity Hospital who lived there during the whole time, and did not go out. In the winter of 1854 he left the hospital for other purposes; and in 1855 he was one of the first cases brought in with yellow fever, and died with black vomit. That is only an isolated case, but I merely mention it. In 1859 a ship came in from a German port with three hundred emigrants on board, of the better class, and yellow fever among them. They had sailed on the south side of Cuba and got the disease away out at sea, where it would be difficult to quarantine it. They had been becalmed in that hot region. Some forty of these subjects were brought to Charity Hospital and placed indiscriminately along with numbers of other unacclimated persons. The disease ran its course, and a large number of the forty died, but not a solitary case took it in the house. These are instances which occur on a large scale. Nobody will pretend to say you can place forty cases of the misnamed Irish typhus, or ship fever, among other patients without some of the others taking it, though that disease requires some little exposure. They would get it with us, but the disease would not stay with us; it soon ran out, and was not disposed to spread as it does in northern cities. But we have instances continually in New Orleans to prove the non-contagiousness of yellow fever. In the beginning of epidemics, when the disease is located in the lower part of the city, cases occur of men taking the fever, and being brought

away and treated in healthy parts of the city. In such cases nobody takes the disease from these persons. In 1856 and 1857 yellow fever occurred in the city, and was strictly confined to about six squares; and though the poison was evidently potent, there were no cases outside. They were very anxious to prove that it was imported, but these cases had had no connection whatever with anything that came into the port. It originated there. Forty cases, I think, were brought to Charity Hospital, and I traced them all to this region. It was my habit to find out whence each case came, and all these cases could be traced directly to this region, limited to six squares. Nobody else took it from the cases brought us, nor did any new points of infection occur. But it is strange how easily the human mind is convinced upon a subject when it wants to be convinced. After the epidemic of 1853 I went into the country, and thought I would make inquiries from the common people who had no prejudices. I found them about equally divided, each having made up his opinion from what he had seen. One had had a case brought into his house, and nobody took the fever from it; but he had seen cases where overseers had gone back of the plantations to escape it, and had there taken it. There was one favorite instance cited among them, of a family living in the "Piney Woods," of six men, the father and five sons. One got the fever, and all took it from him, and all died. I did not take any pains to argue with them, for you will find the most difficult people to argue with are those who do not know anything about the subject. I finally asked an intelligent man, "Pray, where did the first one get it?" Said he: "The first one had gone to the banks of the river, and was standing on the high bluff when a steamboat, having yellow fever on board, passed up, and he took it." Now, I visited the place, and the spot where he stood was three-quarters of a mile from where the steamboat passed him in going up; so if he took it in that way, it would argue contagion beyond all doubt. But many persons make up their minds from instances just as far-fetched as this. I mention these circumstances, which have convinced me that yellow fever is not personally contagious. How far its atmosphere may go, or how much atmosphere bottled up or carried in a ship may contain poison enough to give it to a person who may be so unlucky as to breathe it, I cannot say. I have thought a ship might become charged, and, with the hatches closed, might contain enough poison to communicate it by inhalation. This is not an unreasonable supposition, but I do know that the fever patients themselves, and the filth that accumulates around them, do not generate the disease. So far as the theory of its being carried by ships is concerned, it would be well to inquire into the condition of ships coming from infected ports; but in case of its being communicated that way, it is certain that it would go no further than the individuals who went on board that ship and breathed that atmosphere.

III. The disease itself varies in the manner of its attack. The most favorable attacks are those where it is ushered in at once with marked and prominent symptoms; where the patient is taken with rigor (not a violent chill), followed immediately by pains in the limbs, back and head, with reaction, heat of the skin, and fever. But in a great many of the cases the attack is insidious, accompanied by a kind of energy which enables the patient to be up, though he has a little rigor and aching in the limbs. He keeps about a day or two; but the disease is making its progress in the blood all the time, so that when a physician comes the patient says he has been sick two hours, when he has really been sick two days. While the patient is moving about, the poison causes more fearful ravages upon the system than when he is quiet; and that is why those cases are more favorable where the disease is ushered in briskly at once. The physician is more likely to see them at the beginning, and the patient is more likely to adopt proper measures. That is the reason the disease is so troublesome now. A large proportion of the cases occur among strangers, who have nobody to coerce or take care of them, or direct them. Many of the cases, as virulent as they would appear to you, are mild, though the mild cases are just as sure to kill as any others; and almost all will prove fatal unless the patient is managed properly and kept quiet. Take a plain common case—that is ushered in at once with rigor, and pains in back, head, and limbs. There is sometimes also capillary engorgement, particularly noticeable in the eye, though it is not that conjunctival engorgement frequently seen, but a redness of the vessels of the eye which is not seen in any other fever; and in the same proportion will you also see a peculiar redness of the skin. That, however, cannot be said to be characteristic; but you often see it. If the patient is placed in bed and under favorable circumstances, he is disposed to go into a sweat, as after a common chill of intermittent. This affords some relief, but not much. The pains continue, and if the case is a favorable one, the sweating will go on until that and the heat subside together, provided the patient is kept perfectly quiet. Then, if he is nourished, he will rally and suffer no more than the one paroxysm. Three days is the most common period. In the course of the third day the fever leaves, and the patient is then in a favorable condition. It is then essential to nourish him. He ought not even to raise his head from the pillow until his blood has been renewed. The effect of this poison, whatever it is, is such upon the blood that it almost destroys it; and if the patient is allowed to get up, a faintness comes over him, perhaps accompanied by nausea, and sometimes the whole process of the disease is renewed. With faintness, and a loathing for food, the patient generally dies with great certainty, when he would be perfectly safe if kept quiet and nourished. This is the course of favorable cases.

IV. The treatment of such cases is simple. With regard to purgatives, they do not want them. There is too much disposition to purge patients. If the patient has been eating recently, and has ingesta on the stomach, it may be desirable to evacuate it from fear of fermentation, and consequent irritation. A little oil will act easily, and be effective, if taken four or five hours after meals. If the bowels are constipated, a simple injection, to evacuate the lower bowel, is all that can be useful. Then let the patient alone, and never let him get out of bed until he has been thoroughly nourished. If I see them in the beginning of a case that is ushered in suddenly, as soon as there is any perspiration I give a full dose of quinine. The effect is remarkable. There is no doubt about its value at this time. It quiets all those pains as completely as in a case of neuralgia; it checks the rigor and promotes perspiration, and if you manage them carefully they will go on sweating, and there will be no return of the fever. I used sometimes to give a smaller dose of quinine next day. I do nothing else, but regulate the drinks. There is nothing more to be done. There is no pathology visible; there is no organic disease; nothing to be found by the dissecting-knife. There is simply this condition of blood, which is shown later by discoloration of the skin. The pains in the head and back induce many to make ice applications. I do not think they do any good, but on the contrary a good deal of harm. If you once make the application, and it is left off for a

moment, reaction comes on, and the pain is intense. If you do not put ice on at all, the patients complain very little. My patients very seldom complain of pain. Once having applied ice, you must keep it constantly there during the whole course of the disease, and even afterward, and I believe they suffer a great deal less if you do not use it at all. Cups have been very much used at times. Some men who adopted this plan of treatment made quite a handsome fortune during the yellow fever season. Everybody had to be cupped, on the stomach, back, and behind the mastoid processes. There is no advantage in losing blood unless the patient is plethoric; then he may have a little surplus blood taken, perhaps with advantage. As for applications of mustard, I find the less the patient is disturbed the better; but sometimes a sinapism over the back relieves them in a remarkable degree. You can reapply it as often as you please. The same application to the back of the neck will relieve the pain there, and is almost always more or less valuable. The matter of nausea is of the first importance. Until they are nourished they cannot get up with safety, even though they have had a very light attack. I give any nourishing drink they can take often during the disease; and they will bear stimulants in almost any stage, if they crave them. There is a peculiarity in the stomach of the yellow fever patient: he will retain anything he likes, and reject almost anything that is unpleasant. I would not inculcate the idea that they need stimulants during the disease, but it may be given while the fever is on; and you will find the local symptoms are not aggravated by stimulants when the general condition requires them. Those who have been accustomed to stimulants will sometimes take them while they have fever. I usually allow just what they crave; and they will take brandy when they have fever, and the skin will become moist under it, and the pulse slower; though I should remark that the pulse is not generally very frequent, and seems to have a good deal of force. There is generally some uniformity of the taste in craving stimulants. Some years they generally crave malt liquor, as good Scotch ale; other years champagne, and other seasons brandy; and it can always be administered, even during fever, if there is a sinking condition with disposition to sigh. After the fever has subsided, you can give them malt liquor. I prefer it if the patient likes it. Then they will very soon rally, and any solid animal food or other proper nourishment may be given. If the patient, from any cause, is not inclined to take nourishment, it is always advisable to give it by injection. The rectum will absorb it. I have fed cases in this way, and they have rallied. Any way to get nutriment into the system. If you do not administer nourishment in time, the patient will loath it, and you will then find it difficult to nourish him it all. It does not take much to answer the purpose; convalescence is rapid, and they will soon get up and go about their business. This is only in the favorable cases. In patients who knock about and are imprudent, the fever will run five or six days, the skin becomes dry and hot, and it is useless to attempt to promote perspiration. I would remark that the sweating is often overdone. Patients are kept sweating under blankets in hot weather until it oppresses them. You may carry a proper course of treatment to excess. The idea is to keep the patient covered and perspiring without carrying it to excess; but if you pass this stage, and the hot stage comes on, this will run five days; the patient will feel perfectly well, and then there will come on a relapse, and black vomit follows. Some use cold baths; but the less the patient is disturbed the better, so I prefer sponging quietly. There is a singular sense of exhaustion, and I always consult the patients with regard to the use of water. The patient will generally convalesce in the same manner when the disease terminates on the third day; but you have to watch carefully, for you can sometimes anticipate symptoms, and give medicine for what is going to be.

You will perhaps observe the patient becoming restless, and he will tell you he has a little burning in his stomach, and then you know that he is progressing toward black vomit. Muriatic acid is about to be formed in the stomach, and you may anticipate it. The best remedy I have found to be small quantities of bicarbonate of soda and morphia—about one-fourth of a grain of the latter in a four-ounce mixture with a little soda, of which mixture teaspoonful doses may be given. It is remarkable how susceptible they are to opium, and by the soda the acid is neutralized. In the way of nutriment, beef-tea, either by the stomach or by injection, is of great value. If you can wear the patient through this stage he will get well, while he would die with perfect certainty but for these little things. It is the judicious use of little things that saves him. People generally think it is a mighty disease, and wants mighty medicines—great things to tear them all to pieces. When I first went to New Orleans, sixty grains of calomel was the ordinary dose; and they often liked to give more. Some used to carry it in their pockets, and having given as much as they dared, they colored it with charcoal; but it was calomel to the end, and it was remarkable that some of the patients got well, too! Another feature of the disease is, that when it is ushered in with rigor the patient is a little delirious. That is not significant in the fever, but shows a degree of enervation if it comes on later. It is one of the conditions you should anticipate. The patient may discover a disposition to this aberration, which you may treat by a simple anodyne and stimulant, and thus prevent subsequent delirium. When it once sets in it is like mania à potu, and is unmanageable; the patient exhausts himself if you do not give anything, and if you do, he goes into coma and dies; so you must observe the symptoms in season. It is that nice observation which enables one to take advantage of little things and prevent serious mischief. I look upon a patient with yellow fever as a perfectly irresponsible being; he talks to you reasonably, but he is a crazy man; he is completely perverted; he will get up; he will say he has no fever; he will talk quite rationally, except that he is a little more susceptible, and disposed to be argumentative, and it is difficult to make him obey. It is for that reason the disease is so destructive now, and always among strangers. It is strange what a difference there is in favor of a patient in a family where there is a sensible matron to take care of him. Ten such cases will give less trouble than one elsewhere. She sees the beginning of the disease, and prevents patients from going out till your next visit, when she tells you quietly there is another case. Yellow fever patients are apt to labor under a misapprehension as to themselves. There is a sort of exhilaration that gives them a don't-care feeling; they are sure to think they have some important business to attend to and must go out, but they cannot tell you what it is if you ask them. That is one cause of the fatality of the disease. It works upon the system with much more severity while the patient is knocking about. I have met them walking on the sunny side of the street buttoned up to keep warm. They perhaps get chilled, and are picked up in a stupor. They cannot be advised or restrained. This is true of those who have been staying there on purpose to become acclimated. They feel so well after the fever subsides, that they cannot be induced to stay in bed. I

have known the fever, under quinine, to disappear in twenty-four hours. But if they get up, having taken, perhaps, fifteen or twenty grains of quinine, they cannot walk across the floor; but will faint and fall, if the fever has gone. Yet you will find great difficulty in keeping such a one in bed. Of course, those left to themselves will get up, have a relapse, and die in the end.

There is little more to be said in regard to treatment. Purging is to be avoided, though it is remarkable how much violent treatment patients will bear. If they have a fair chance otherwise, two out of three will get well under very harsh treatment. I took occasion when I had command of a hospital to make a comparison. We had about six visiting physicians in the house, and all had some favorite mode of treatment—all more or less perturbating and active. Each one boasted of his success. I, having charge, ordered that patients should be sent in rotation with the utmost strictness, so that each physician should have about an equal number of good and bad cases. I happened to have four wards myself, and at the end of the month I found by the report that the several physicians had results just about the same, once in a while a case or two being in favor of one or another; whatever perturbating treatment was used, it made no difference, but there was a difference of ten per cent. in favor of letting them alone, and simply managing them on the principles I have mentioned to you. Any one would like, in a case of life and death, to have the ten per cent. advantage. I should mention that cases were sent to my ward the same as to the others, and I had no object but to get at the facts. There is a curious disposition in people to think they are getting the fever when they are not, and when they do get it they will not believe it, and will commit imprudences that favor the progress of the poison. I should say further of the use of quinine, that I have never known any one to use it as it should be used. I never give it but at the outset of the disease, just as the rigor has passed off, and the fact that it relieves pain shows it to be useful. It promotes perspiration, and prolongs the sweating stage. A larger number of cases under quinine will terminate the hot and sweating stages together, so that you resolve it into one paroxysm, and that a short one, and less likely to return. Without quinine the fever is more likely to return and render the case dangerous.

I cannot insist too much, in conclusion, on the total irresponsibility of the patient, and the great importance of keeping him quiet by gentle means, and without rendering him impatient. Force would only do mischief. I recollect the captain of a ship (and they are generally a little imperious), who was my patient, and was doing wonderfully well one night when I left him, but who, on my visit next day, had defied the nurse and driven her out of the room. He was then beginning to gulp, and was going rapidly toward black vomit. I took him by the shoulder, laid him down, and told him seriously I would cut his throat if he turned right or left before I returned. He was alarmed, obeyed me, and got well, and used afterward to laugh over it, saying he was firmly impressed with the idea that I would really do as I threatened if he disobeyed. This shows the peculiar condition of the mind, for he could converse rationally at the time.

I will only add that nothing is to be gained by depletion, and that I have had cases where the bowels were unmoved for six days, and that yet did well. It is better to avoid all causes of exhaustion, even that attendant on the use of the bedpan.

VELPEAU'S LAST WORDS: *Il faut toujours travailler, mes amis.*

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, OCTOBER 2, 1867.

DR. HENRY D. BULKLEY, VICE-PRESIDENT, in the Chair.

TSA-TSIN, OR THE RHYNCOSA EXCAVATA, AS AN EMMENAGOGUE.

DR. PRINCE presented a very interesting report concerning the above agent, in the course of which he recited fifty-five cases in which the drug had been exhibited. Twenty-six of these occurred in his own practice. He proved that this Chinese remedy had attracted the attention of some of the profession in England some sixteen years ago, but since then, strangely enough, had fallen into disuse, so that now it was generally regarded as a discovery. It had also been employed by German physicians. The Doctor exhibited a specimen of the article furnished by its importer, Mr. Albert Dung; this was in a coarse-grained powder of an olive-green hue, and the form best adapted for its exhibition he found to be a decoction of a strength representing from ʒ j. to ʒ iij. of the powder.

The article was entirely harmless, was not an abortive, but acted as a sedative upon the uterine system, and proved its specific action by increasing the menstrual flow.

The experience of all the gentlemen, however, who had tested this agent was not uniform, nor as satisfactory as that of the reporter.

DR. CHAMBERLAIN gave the details of three cases—in one of which he had ineffectually exhibited ʒ iv. for five days—in the other two the results were negative.

DR. HUBBARD had hardly given this emmenagogue a fair trial; but in his solitary instance had employed ʒ iv. prepared after Mr. Dung's directions, and with no more success than the last speaker.

DR. PRINCE, in reply to a query by Dr. Bulkley, had found that the samples had varied in strength and excellence.

DR. HARRIS, in view of the fact as stated by Dr. Prince, that no chemical analysis had as yet been made, offered the following, which was unanimously adopted:

Resolved, that Dr. E. R. Squibb, of Brooklyn, be requested to examine this drug, and that he report to this Academy at his earliest convenience.

He thought that the alkaloid of Tsa-Tsin, if it had any, might possibly be discovered in this way, and with it the profession might experiment more satisfactorily.

After a recital by Dr. Harris of certain remarkable cases of anomalous fever which had occurred in the vicinity of this city, and which are now being investigated, the Academy adjourned.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

STATED MEETING, SEPT. 2, 1867.

DR. SAMUEL T. HUBBARD, PRESIDENT, in the Chair.

THE PUBLIC HEALTH.

DR. DUNSTER, as Secretary of the Committee on Diseases, read the report, which embraced a period of thirteen weeks, ending August 24th, ult. The average weekly mortality (519) during this time was less than the corresponding weeks of the previous year, and exhibited an actual decrease of sixty-four deaths. This was accounted for by the absence of any epidemic, and the favorable meteorological and sanitary condition of the city.

The zymotic diseases constituted in June twenty-nine per cent., in July forty-two per cent., and in August forty-seven per cent. of the entire mortality—in this class, diarrhœal diseases were the most destructive. During this period, however, cholera claimed only eighteen victims, against 834 of the previous year. Scarlatina and rubeola have been quite prevalent, the mortality from the latter disease averaging during the entire summer twenty per week.

The tubercular diseases show the unfavorable effect of extreme and prolonged heat—since in August the death-rate was equal to a figure attained during the inclement weather of February and March. On the other hand, the mortality ascribable to pneumonia and bronchitis had inversely declined.

During the thirteen weeks, 23·7 inches of rain fell, which, as it washed away vast amounts of filth, exerted a beneficial effect. This, however, would not have been the case if the city had an absorbing and retentive surface soil in lieu of an extended and perfect drainage.

PAPERS READ.

Dr. Noyes read a paper entitled "Recent Modifications of the Operation for Cataract, and their Results." This was statistical in character, and contrasted the different results as obtained by the ancient and by the modern methods. He clearly proved that the recent plans of treatment were much the more successful.

Dr. Thoms followed with a plan for the registration of atmospheric changes, adapted to the exhibition of their influence upon disease and mortality.

THE ANNUAL COLLATION.

The President announced that the next meeting of the Society would be its anniversary, on which occasion the annual election would be held. He also stated that the annual collation, which embraced within its plan a general reunion of the profession, would be had on or about that time, and appointed the following gentlemen a committee of arrangements to carry out the purposes of the Society: Drs. Wm. B. Bibbins, Ellsworth Eliot, James L. Brown, Jerome C. Smith, John Shrady, H. M. Brush, Wm. B. Lewis, and Wm. T. White.

The Society then adjourned.

EAST RIVER MEDICAL ASSOCIATION.

Stated Meeting, Sept. 3, 1867.

Dr. Verranus Morse, President, in the Chair.

THE DECEASE OF DR. JOHN HART.

Dr. T. Nichols reported resolutions of condolence upon the decease of Dr. John Hart, a former President of the Association, which were ordered to be published in the medical journals of this city.

Dr. Morse spoke in eulogistic terms of the deceased, and gave an account of his last illness, together with many incidents of his life.

UNAUTHORIZED REPETITION OF PHYSICIANS' PRESCRIPTIONS.

Dr. John Shrady presented the following, which was adopted:

Resolved, that in view of the meeting of the American Pharmaceutical Association on the 10th inst., it is eminently proper that the action of this Association regarding the unauthorized use of physicians' prescriptions by apothecaries be referred to the former body.

GRADUATES OF AMERICAN MEDICAL COLLEGES, AND THE GERMAN SOCIETY OF NEW YORK.

Dr. Brekes introduced the following, which were also adopted:

Whereas, it has been represented that the German Society of the City of New York have resolved that no graduate of an American Medical College shall be appointed to the position of District Physician, therefore be it

Resolved, that the Association, through their committee, ask for information on said subject, and respectfully request the reasons for said action. Committee, Drs. Brekes, Weisse, and Blume.

Dr. Weisse then read the report of the Surgical Section, in which he gave an interesting and condensed summary of the progress of that department of science for several months past.

DIFFICULTIES IN DIAGNOSIS OF ABDOMINAL TUMORS.

Dr. O'Sullivan read a paper with the above caption. He warned against a too great haste in diagnosis, especially with reference to tumors in suspicious localities, and recited an instance where a popliteal aneurism was laid open instead of an abcess. This necessitated immediate amputation, death ensuing in a few days.

In regard to the abdomen, notwithstanding the publication of many interesting cases implicating some particular organ of the cavity, he was somewhat astonished that the question in its general bearings had never been discussed. A notable exception, however, exists in the case of the *American Medical Association* (see Medical Record, vol. ii., p. 130), who have deputized a committee to investigate the subject. For the purpose of more fully illustrating his views, he related

A CASE OF CARCINOMA OF THE LIVER OF SIX MONTHS' STANDING.

Some years ago he was consulted by S. P., a native of Canton, China, who first came to America in 1816, in the capacity of ship's steward or cook. For the past sixteen years of his life, however, he kept a Chinese sailor boarding-house in Cherry street.

He was married twice; by his first wife he had no issue, by the second three children, all of whom are living. He enjoyed, for a considerable time previous to his last illness, excellent health. Some eighteen years since, whilst on a voyage from New Orleans to this port, he met with an accident which caused a severe contusion of the right side; owing to which, on his arrival here, he entered the hospital, where he remained several weeks.

According to the rather general custom of his countrymen, he was an inveterate opium smoker, but during his last illness he practised this rather moderately. In other respects, the history of the patient, owing to his imperfect knowledge of our language, is necessarily incomplete.

When he first consulted Dr. O'Sullivan, he referred his trouble mainly to the region of the stomach, where there was a very strong pulsation; he also complained of pain in the chest, being unable, however, to localize it. He also suffered from constipation, which had become habitual in its character. A careful examination of the lungs and heart revealed nothing abnormal. Still pursuing his investigations, he discovered a large tumor in the epigastric region, below the diaphragm, and in a line with the transverse colon.

It presented a nodulated appearance, and its extent, he fancied, could be quite readily traced. Auscultation elicited no thrill or other symptoms of aneurism. Percussion elicited dulness over the entire extent of the tumor. The usual symptoms of carcinoma were absent. It then occurred to him that it might be a fæcal accumulation; this seemed the most probable theory from the history of the case, the position of the tumor, and its painless character. This idea, also, after a fair trial, he was reluctantly obliged to reject.

On examination of the tumor, after an interval of several weeks, during which the patient had omitted to call at his office, he found that it had increased somewhat in size, also that it was a little tender on pressure; in other respects the symptoms had undergone no change. After a careful examination by a physician of eminence, whom he had called in consultation, the latter inclined to the belief that it was a fæcal tumor, but stated his opinion with some reservations, and advised saline cathartics, to be followed by injections, etc.

Free movements of the bowels, without any appreciable effect on the tumor, were the only result. As this plan of treatment only debilitated, it was, with the consent of the consulting physician, suspended. The patient was frequently seen during the month, during which time he complained of very little pain in the tumor, and scarcely any irritation of the stomach; he could retain his food very well, though his appetite was somewhat fickle; occasionally, too, the loss of sleep troubled him very much. To meet this indication, he prescribed a pill of camphor and hyoscyamus, which for a time seemed to relieve him; he was also taking at this time a bitter (fluid ext. quassiæ), and locally he had applied a belladonna plaster, etc. A messenger, who came with an urgent solicitation at 11 P.M. a month after, stated that the patient had been injured in a *mêlée* at their house a short time previously. On arrival, Dr. O'S. found him suffering much pain, kneeling in bed and resting on his face and hands, which position, with much difficulty, he succeeded in getting him to change. He then ascertained that his Chinese patient, whilst in the act of leaving his room, in a fit of anger was pulled back by an excited female relative, who seized him by the waist, and thus made direct pressure on the tumor. From thenceforward he continued to complain constantly of pain, his stomach, however, behaving as well as usual. About this time a surgeon of eminence, now deceased, saw him, and pronounced in favor of an aneurism, although he confessed that the symptoms were not as well defined as usual. He advised a continuance of the same line of treatment. The pain and uneasiness in the region of the tumor, however, seemed to have increased; and the patient, a little despondent, and naturally enough anxious for a change of remedies, desired further counsel. Accordingly, Dr. E. R. Peaslee was called; and, after a thorough examination of the case, very decidedly excluded aneurism. He thought it probable that the growth, whatever it was, was attached to the left lobe of the liver; as to its character, he could not determine. This opinion was also expressed by the late Dr. Sinclair, who saw the patient a few weeks before. The patient continued in this condition some days, feeling pretty comfortable, being able to walk about his room, and seemingly not suffering much from debility or loss of flesh, having even gone to Brooklyn on a visit to some friends for a couple of days. His daughter stated to me that he would have remained some time longer, but for the want of his opium pipe. He finally died in a semi-comatose state; and three and a half hours after death, Dr. O'Sullivan, assisted by the late Dr. D. S. Conant, made the autopsy.

After opening the abdomen, the peritoneum on the upper part of its cavity was found in a state of great congestion, and considerable ecchymosis existed in the epigastric region. The large tumor which had caused so much diversity of opinion previous to death, was found to be connected with the left lobe of the liver; turning just below the mass, the transverse colon crossed the abdomen, whilst, resting upon the lower projecting portion of the growth, the pylorus and duodenum crossed in the direction of the mass, which was readily dissected up from the aorta, and removed with a portion of the pancreas, which was adherent to its lower border, by making a section of the liver through the longitudinal fissure. The abdominal aorta was then dissected out from below the bifurcation to the middle of the thoracic aorta, and found to be almost perfectly healthy. The accompanying specimen he brought away, not without the consent of all concerned, but amid the howling of the excited Chinese. Specimens of the contents of the lower cystic and divided portions of the preparation, have been examined by Professor Flint, Jr., and found to be composed of cancer cells, free nuclei, fatty globules, and granular matter, as were shown in the accompanying diagram.

After some debate upon the paper, the Association adjourned.

Progress of Medical Science.

NEW METHOD OF PRESERVING FLESH.—Dr. Brunetti, of Padua, has discovered a new method for preserving flesh, for which he has been awarded a gold medal at the International Exhibition. The following description of the process is given by the Paris Correspondent of the *N. Y. Times*:—The process of Dr. Brunetti comprises several operations, viz.: 1, the washing of the piece to be preserved; 2, the *dégraissage*, or eating away of the fatty matter; 3, the tanning; and 4, the desiccation. 1. To wash the piece, M. Brunetti passes a current of pure water through the blood-vessels and the various excretory canals, and then he washes the water out by a current of alcohol. 2. For destroying the fat he follows the alcohol with ether, which he pushes, of course, through the same blood-vessels and excretory ducts; this part of the operation lasts some hours. The ether penetrates the interstices of the flesh, and dissolves all the fat. The piece, at this point of the process, may be preserved any length of time desired, plunged in ether, before proceeding to the final operations. 3. For the tanning process, M. Brunetti dissolves tannin in boiling distilled water, and then, after washing the ether out of the vessels with distilled water, he throws this solution in. 4. For the drying process, Dr. Brunetti places the pieces in a vase with a double bottom filled with boiling water, and he fills the places of the preceding liquids with warm, dry air. By the aid of a reservoir, in which air is compressed to about two atmospheres, and which communicates by a stop-cock and a system of tubes, first to a vase containing chloride of calcium, then with another heated, then with the vessels and excretory ducts of the anatomical piece in course of preparation, he establishes a gaseous current which expels in a very little time all the fluids. The operation is now finished. The piece remains supple, light, preserves its size, its normal relations, its solid histological elements, for there are no longer any fluids in it. It may be handled without fear, and will last indefinitely. The discovery is a magnificent one, and the sooner medical schools are provided with full cabinets of natural and pathological pieces the better.

TREATMENT OF SCROFULOSIS.—Dr. T. Balman (*Lancet*) proposes a treatment for scrofulous disease of the external lymphatic glands which consists in the local application of pledgets of lint soaked in *iodine*. If the disease be chronic, pencil with *argent. nitr.* every five or six days. When abscess forms, open at once, apply lint, and paint with iodine.

THE CAUSE OF RACHITIS.—Dr. Dick, in a communication to the Pathological Society, London, proves rachitis

to be a disease of mal-nutrition of bone. He experimented on puppies—taking certain ones of the litter from the mother's breast, and raising them by hand; in these he produced the disease artificially, while the nurslings were exempt.

A Question regarding Nutriment.—Dr. Thudichum asserts that Liebig's extract of meat lacks the essential properties of nutriment. It contains the elements required in very small proportion, and in an oxydized state, and is simply a stimulant, a strong beef-tea when prepared for swallowing. Of the twenty-five per cent. solid substance contained in meat, four-fifths are insoluble in water, or become so by boiling, allowing only one-fifth of the solid parts, or five per cent. of the whole, to be saved in the extract. He thinks that, after eggs, the nearest substitute for meat is Indian-corn and other kinds of seeds, beans, peas, etc., when grown in southern climates. Northern grown beans are not approved, and this kind of food always requires peculiarly careful preparation to be digestible. Vegetable food requires much digestion, and its use demands and creates an increase of the stomach, which is visible in well-fed vegetarians.

Fish Biscuit.—Professor Rosing, of Asa, France, has invented a process of making flour from a species of sea-fish, which he forms into biscuit, thereby providing a very nutritious and compact article of food. These biscuit are four times as rich in albuminoid substances as beef, four and a half times as fresh codfish, and sixteen times as fresh milk.

Weaning—A writer on this subject, in a communication to the Boston *Medical and Surgical Journal*, says: "The best average I can make, gives almost eleven months as the approved term for lactation. But eleven months is a longer period than I would have, as a rule, in the present state of society. Children weaned at nine months do as well as those weaned at eleven months, for aught I have discovered, and three months will, in many instances, be added to it from a variety of causes; and if a longer term than nine months is named, just as much will be added to that, and lactation will be prolonged to a very doubtful period.

"I suggest nine months—not as prefigured by gestation, or anything else, but simply as a reasonable term for nursing. In support of a shortened term of lactation, I have an impression, strong enough to influence me a good deal, that children nursed beyond a year—above all, for two years—are not likely to do as well as those weaned earlier; and that scrofulous or puny children are not benefited by an extended term of nursing, especially of their own mothers; and, on the other hand, that mothers are generally benefited by a brief term of lactation.

"The advancement of the teeth is generally made an item in deciding the question of weaning. The age for the development of the canine teeth—the most dreaded period of dentition—is about the eighteenth month; and to wait for the appearance of those teeth, would be to establish an unreasonable term of lactation.

"On this point of the importance of the development of the teeth, writers are very indefinite; and each writer who does specify what teeth he would have the child exhibit at the time of weaning, states that children usually show the specified teeth at about the age he has named as the fit time to stop lactation; so that in fact the cutting of the teeth comes to be a part of a cautious theory, but is in reality of very little consequence in deciding whether a child should be weaned or not."

On the question of the season of the year when a child should be weaned, the same writer says: "The suggestions of Dr. Dewees, which divide the year into a convenient, an inconvenient, and an improper season, were based on a large and careful observation, and are well worth remembering. If we look, however, for a formula on the season, we shall hardly find anything more concise than the words 'either after the warm season has passed, or before it has commenced. Of the two I prefer the former.' I will only add for myself, that (so strong is my conviction that much nursing is not welcome by the mothers of this day), I would not hesitate to wean in the spring. If a child is nine months old early in May, I would advise that it be weaned, unless its mother exhibit uncommon capacities as a nurse. But each case of weaning, like each case of sickness, is to be considered and managed by itself, and not to be disposed of in rigid accordance with any fixed rules or maxims."

Persistent Eclampsia; Forced Delivery Accomplished by Bilateral Incision of the Cervix Uteri.—Wm. P. Holt, M.D., in the *Southern Medical Journal* relates the history of a case to which he was called, where the patient was "a primipara aged 19, stout, robust, and very plethoric." She had had "grinding pains" for several hours. An examination revealed the os high up, *undilated* and rigid. Had had great fulness about the head for three weeks, and the limbs were œdematous. Four hours after the first examination, the os was found in the same position and condition. Convulsions came on soon after, which were modified, but not controlled, by chloroform. The convulsions still continuing, it was decided to take blood from the arm, which was done copiously; but the convulsions again recurring, it was decided to make a bilateral incision of the cervix uteri with the probe-pointed bistoury, forcibly dilating with the finger. A hook was then introduced, the fœtus caught in the groin (it being a breech presentation) and delivered. The after-birth soon came away entire, and the patient made a good recovery.

Treatment of Opium Poisoning by a New Method, by A. Le B. Munroe, M.D.—A lady had taken two ounces of laudanum, from the effects of which she was in a state of profound *coma*. Emetics were used, and afterward the stomach-pump was applied, and the stomach thoroughly worked out, which produced no amelioration of the symptoms.

The following treatment was then instituted: "The patient was placed upon her back on the floor, with her head elevated a little upon a folded sheet, the clothes slipped down below the waist, leaving the chest entirely bare. A pail and a pitcher of cold water were then brought in. The pitcher was then raised to the ceiling, eight or nine feet from the floor, and the water allowed to fall in a small stream upon the epigastrium. By the time the first pailful was exhausted, the breathing had become a little more frequent and equable, and the stertor less. The second pailful was brought in, and soon, to my great joy, I could see that the deathly pallor of the face was being lighted up by the flow of the vital current from the heart; a blush, barely perceptible at first, gradually and steadily spread over the before pale and expressionless features, until it warmed into the full glow of life and health. By degrees other manifestations of returning life appeared. She began to make efforts to move away from the pouring stream, weak at first, but increasing in strength, until she could turn partly over and interpose the hands to break the force of the stream. At length, after about three pailfuls of water had been used, her struggles to escape from what was now evidently torture, were quite severe;

and about this time, to our infinite satisfaction, she began to beg for quarter in long-drawn, drowsy syllables, increasing in energy and force, until they were uttered in a tone and manner which evinced a considerable degree of passion, and even anger, at the strange and even cruel treatment to which she was subjected. But even now she would fall asleep immediately if let alone. Having continued it as long as we thought necessary, we desisted, and rubbed her dry with warm cloths. We then raised her up and walked her about the room for an hour or more, resting at intervals. She recovered without any permanent ill effect.

"I believe this treatment will be more effective in the cure of extreme cases of opium poisoning than anything else. Doubtless it would be just as effective in poisoning by other narcotics, and possibly in some cases of suspended animation."—*Boston Medical and Surgical Journal.*

CROUP TREATED BY SULPHUR.—*The British Medical Journal*, quoting from the *Gazette Med. de Paris*, states that M. Lagonterie, from observing the effects of sulphur on the oidium on vines, has been led to administer it in several cases of croup. He mixes a teaspoonful in a glass of water, and gives the mixture in teaspoonful doses every hour. The effect he describes as wonderful. The disease, in effect, is cured in two days, the only symptom remaining being a cough, arising from the presence of loose particles of false membrane in the trachea. Mons. Lagonterie says he has followed this plan in seven cases, all being severe, especially the last, the patient being cyanotic, with protruding, rolling eyes, and noisy respiration.

HYDATIDS OF THE UTERUS.—Dr. W. H. Grimes, in the *Leavenworth Herald*, states that he attended a patient where there were expelled from the uterus fourteen pounds of hydatids. "The woman was a good deal exhausted by protracted suffering and subsequent hæmorrhage; this condition, however, was soon relieved by cold application, and repeated doses of tannic acid and morphine. She rapidly recovered, and has had no further trouble from the disease."

LEPROSY.—Surgeon C. Macnamara, of the Calcutta Hospital, draws the following conclusions in regard to this disease: 1st. Leprosy is very common among the natives, about one in ten being affected byit, and it is probably on the increase. 2d. It is much m ore common among the pure natives than among other tribes which have become degraded by intermarriage with them, and it is very rare among Europeans. 3d. It is hereditary and inoculable, but not propagated by simple contact, or through the air, or by sexual intercourse or other means. 4th. It has no connection with syphilis, and was prevalent in India centuries before that disease was known. 5th. It is probably curable in its premonitory stages, but in the anæsthetic or tubercular form it is without remedy. No provision having been made by the Indian government for the care of lepers, much remains to be learned regarding the treatment. 6th. A proper regard for cleanliness and other hygienic considerations seems amply sufficient to prevent the disease.—*Pacific Medical and Surgical Journal.*

GRINDELIA IN ASTHMA.—Since our former notice of this plant in asthma, we have testimony from various sources which settles the question of its value. It appears to have been uniformly palliative, if not preventive, of the paroxysms in the cases treated by it. Its action seems to be antispasmodic and expectorant. In the case before referred to, in which the relief was so well marked, it lost its effects measurably after use for six months, though the paroxysms have never been as violent since as before the use of grindelia. We may mention here, that the best treatment known to us for true spasmodic asthma is the hypodermic injection of morphia. The paroxysm is invariably relieved by the injection, and, in a large proportion of cases, does not return for weeks or months. One-fourth to one-half a grain is the proper quantity. With this remedy we approach an asthmatic patient in the hope of giving him prompt and efficient relief. We usually inject it in the arm.—*Pacific Medical and Surgical Journal.*

CANNABIS AS AN ANTIDOTE FOR STRYCHNIA.—The *Chicago Medical Examiner* reports the case of a man who swallowed five grains of strychnia, and was seen nearly four hours afterward, when he had frequent and severe spasms, with rigidity of muscles, and inability to move the limbs; pulse 130. A drachm of the tincture of cannabis was given, and another in five minutes; then two similar doses at intervals of ten minutes, and two doses at intervals of fifteen minutes, with rapid amelioration of the symptoms. The next drachm was given in an hour and a half, after which it was alternated with camphor, as the symptoms demanded. The patient recovered with uninterrupted convalescence, after forty-eight hours.

THE EXTRAORDINARY DELICACY OF THE SPECTRUM TEST in determining the presence of certain metals is well known to scientific men. Bunsen and Kirchhoff intimate that it is possible to recognize in this way the sixty-thousandth part of a grain of potassa or baryta, the one-millionth of a grain of lime or strontia, the sixty-millionth of a grain of lithia, and the one hundred and sixty-millionth of a grain of soda. Dr. Letheby, the distinguished London chemist, has detected by these means, the presence of blood in the stains on linen which had lain by for seventeen years.—*Pacific Medical and Surgical Journal.*

TANNIN AS A HÆMOSTATIC.—Dr. J. M. Linley, in the *Leavenworth Herald*, thus speaks of tannin: "A man, 54 years of age, was presented to me with gangrene of the foot. The line of demarcation was well formed, just above the ankle. I amputated the leg at the middle third. The arteries were easily secured, and no arterial blood was lost, but the venous hæmorrhage was considerable, and soon increased to frightful proportions, although several of the larger veins were secured. I sprinkled tannin over the surface of the wound, and the hæmorrhage was immediately and permanently arrested."

SEPARATION OF TIN AND ARSENIC.—Professor Wöhler's method is based on the solubility of sulphide of arsenic in bisulphate of potash, which does not dissolve the tin. The mass, after being oxidized by nitric acid, is allowed to digest with sulphur and caustic potash till the solution is complete. The liquid, after being treated by sulphurous acid in excess, is allowed to rest for some time, and is then evaporated until all the sulphurous acid is driven off. The sulphide of tin is then removed by filtration, and washed with a strong solution of common salt, which may be removed from the precipitate by an acid solution of acetate of ammonia. The sulphide of tin is converted into the oxide of tin by roasting in contact with air. Arsenic may be precipitated from the arsenious acid contained in the liquid by a current of sulphuretted hydrogen.

TREATMENT OF BURNS.—The treatment for this class of affections in St. Thomas' Hospital, London, is to whitewash the parts with a paste of whiting and vinegar. The crust is left on until it falls off, when a renewal of the application, if necessary, is made.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, October 15, 1867.

THE LATE INTERNATIONAL MEDICAL CONGRESS.

IT seems that the grand international medical reunion at Paris failed to respond by substantial results to the zealous anticipations of many of its warmest friends. Such might have been presaged from a knowledge of the traditional routinism of certain leading spirits of the French school, and from the intellectual vassalage which restricted the free interchange of ideas, and community of thought within such limits as traced by the organizers of this universal medical convention. The conception of assembling the medical celebrities of all parts of the world—each to contribute his share of knowledge and experience, and offer it as a voluntary homage of his nation, and as an individual expression of charitable feeling and disinterested philanthropy—was the prompting of generous and noble impulses, and elicited the commendations and hearty support of the medical profession generally. The medical representatives of the different nationalities met in the enlivening capital of France, regaled by the brilliancy and magnificence of the gay city, favorably impressed and most indulgently disposed to justify to a moderate degree the gratification of a certain vanity so characteristic of Frenchmen, which at times is not displeasing, because attended with so much good feeling. But lo! Bouillaud, the President of the Congress, at its inauguration informs the assembly that "France is Paris, and that Paris is the World," and thus unmistakably exhibits the true motives which actuated the organization of the grand Congress. The President utters an expression of conceit which shows that none are welcome who are not convinced of the insufficiency of their own offerings, and humble enthusiastic admirers of certain French declaimers, who, having selected their own programme, chosen their own subjects for discussion, may very naturally be expected to eclipse the foreigners, most of whom probably are but imperfectly acquainted with the French language.

Our Paris correspondent has faithfully exposed the proceedings of the Congress, which will be read with interest. Impartiality requires that we should adjudge a just meed of praise for the benefits resulting from the discussion of those subjects which occupied the attention of the Congress, although regretting as we do that the organization was so imperfect, disappointing the hopes of many of its well-wishers, both among Frenchmen and foreigners.

One of the questions which appears to have received most attention was, the several complications occurring after surgical operations, and which so frequently cause death. The subjects of tuberculosis, of syphilis, and of syphilization, called forth animated discussions. Menstruation and the preservation of anatomical specimens, although important subjects, engaged the attention of the convention, to the exclusion of other and more weighty matters. At the first meeting, Dr. Van Lohe, of Holland, expressed, in energetic and sensible terms, his disapprobation of transforming the International Medical Congress into a school of medicine, where were pronounced learned dissertations, affording no instruction to any one, but serving merely to display the mutual admiration of certain members. President Bouillaud, in calling the refractory member to order, discovered the sentiments of a large portion of the assembly, and which were manifested by its hearty approval of the intrepidity of the honest Dutchman. It was fortunate that there were some who, if they did not fully represent the medical celebrities of their respective countries, might at least enter a protest against the proceedings of the assembly. No idea can be formed, from a review of the deliberations of this learned body, either of the importance of our own country, or of its claims to a proper and merited distinction. The same, with rare exceptions, may be said of other countries. These remarks are not prompted by a spirit of detraction; on the contrary, the recollection of the great and valuable advances in medical science made in France will cause us always justly to esteem the names of those great men like Bichat, whose giant intellect in a few years regenerated the medical science; Laennec, who discovered and developed auscultation; or who, like Dupuytren, gave a practical value and brilliancy to surgery, and which reflected the highest honor on the profession.

These, and a host of other great men who have added lustre to the French school, have passed from the stage of life; and some have but quite recently, like the last falling leaves of autumn, seemed to drop all at once: Malgaigne, Trousseau, Civiale, Velpeau, Rostan, Rayer, have gone to their last homes, and left but the relic of the past, the President of the International Medical Congress, M. Bouillaud.

The excellence to which the French have attained in their physiological, pathological, and chemical researches, have rendered them eminently distinguished, and caused them to be accepted as the leaders in medical science. Frenchmen have been for a long time, to a very considerable extent, the elaborators of the important

problems which have engaged the minds of medical men; they have been large contributors to our science; but not the only ones. With the march of intellect and the extension of civilization; with the astonishing enterprise displayed in all the departments of industry throughout the world, and especially on this Western Continent, an influence has been exercised upon the progress of medicine commensurate with the general development of intelligence, and the multiplied comforts and conveniences of life. The medical profession of this country is in a position to be a large contributor of valuable knowledge to any international medical congress; and if the organizers of the Paris Congress failed to recognize this fact, others have not. French surgeons now adopt our American operation for ovariotomy, and Frenchmen pay a tribute of respect in many ways to our countrymen. Our ambulances are esteemed the best at the Paris Exhibition; our sewing and reaping machines, with other appliances of industry, which are the real exponents of a true civilization, have been adopted by the French, and the Imperial Government supplies its navies from our iron-clads. Well might the International Medical Congress have anticipated important advantages from a better acquaintance with the progress of medical science in this country, suggestive, at least, if not fruitful in brilliant scientific results.

During the threatened cholera epidemic, we heard much through the secular, as well as the medical press, of the praiseworthy sanitary labors of our Board of Health. Disinfection and purification, zymotic diseases, contagion through the moisture of the earth, were terms well set forth in exhaustive reports, famed for verbosity as well as for zeal in the sanitary reform of our metropolis.

But if all the rumors which reach us have a tithe of truth in them, some of our health authorities are resting with their laurels won, while nuisances in the way of filthy gutters, excrements thrown into the public streets, are left to breed fever and death, with no sanitary inspector "to molest or make afraid." Policemen say that remonstrances are made in vain, and citizens inform us that in individual instances respectful complaints have not even been noticed.

Seriously, gentlemen of the Board of Health, every complaint of a respectable citizen deserves a careful investigation, and, if possible, the nuisance should be promptly abated. Inspectors have other duties than to draw their pay and wear their badges. The city of New York deserves a little more sanitary inspection than that involved in carefully prepared reports and statistical tables. There are crying evils in the city, which the capable medical men engaged as inspectors should daily report until they are abated. After a great struggle, some of our first medical men have been placed on a Board of Health, a band of well-educated inspectors selected, but, in some instances, they pay no more attention to honest complaints, they see no more nuisances in their sessions and rounds, than did the former company of liquor dealers who did our sanitary inspection.

The intentions of the Board are doubtless good enough, but it strikes us that its heretofore fair record is liable to be seriously damaged in the eyes of its firmest upholders by the apathy into which it has seemingly so lately fallen. Eternal vigilance is no less the price of liberty than of health, and we fear that our Health Board needs the monition.

We regret being compelled to notice a severe attack of publicity which one of the professors in a medical college of this city has recently been subjected to, in the columns of the *Evening Mail* of October 7. We are willing, for the sake of the dignity of the profession which he represents, and for the respectability of the number of institutions with which he is connected, to strain our charity, by presuming that he is entirely innocent of any complicity with such a flagrant breach of good taste and medical etiquette. If our presumptions are well founded, and we sincerely hope they are, who among the profession can be considered safe from penny-a-liners in search of items; who can rest assured that, at some future date, the number of his surgical operations may not only be peddled to the community, but that the very privacy of his home be invaded, letting alone the recital of many other details, the bare perusal of which in print would be calculated to bring the blush to his cheek? But if there is no escape, let us prepare ourselves for the worst.

The yellow fever at the South still prevails to an alarming extent, especially in New Orleans and in the interior towns of Texas. In the former place the mortality has been terrible, the number of vicitims to the disease, up to the first of October, being estimated at the enormous number of seventeen hundred and seventy-six. At Galveston and Corpus Christi, the fever, by all accounts, has spent itself, there remaining only a few scattered cases; but in the towns of Lagrange, Huntsville, Hempstead, Mellican, Alleyton, and Navasola, in Texas, it is still at its height. At Hempstead and Alleyton all the physicians are dead, and at Mellican during the past month the mortality has been fully seventy per cent. The different Howard associations are doing their work in a manner that reflects credit upon their name, and the physicians are nobly striving with all their energies and skill to stay the progress of the dreadful enemy. The associations referred to hold regular daily sessions, and the amount of labor that they perform may be in a manner apppreciated when, on the authority of the *N. O. Times* of the 26th inst., we state that twenty-five hundred cases have been on the relief books at one time, and that, on an average, over seventy cases have been reported during each day.

It is estimated that the "Howards" of New Orleans alone will have to spend seventy-five thousand dollars

before the season is over. In view of this fact the amount of pecuniary aid that is needed will be apparent to all. We are, however, pleased to hear that money is being subscribed with a liberal hand for those localities where it is so much needed, and given in the hands of those who use it so wisely. In this connection we may mention particularly that the N. Y. Academy of Medicine recently forwarded the sum of thirteen hundred dollars to the Crescent City, and that the Medical Society of Richmond Co., N. Y., has arranged to send out two of their number to aid their worn-out brethren. It is hoped that the coming frost may soon put an end to the scourge, and that the stricken localities may speedily be released from that appalling gloom which has hung over them for such an unusually long period.

In view of the painful interest now taken in the origin and spread of the epidemic, we have thought it advisable to publish in the present issue a verbatim report of the very interesting lecture on yellow fever recently delivered in this city by Prof. Stone of New Orleans.

Reviews.

A Treatise on Human Physiology, designed for the Use of Students and Practitioners of Medicine. By John C. Dalton, M.D., Professor of Physiology and Microscopic Anatomy in the College of Physicians and Surgeons, etc., etc. Fourth Edition, Revised and Enlarged, with 274 Illustrations. Philadelphia: Henry C. Lea. 1867. 8vo, pp. 678.

Prof. Dalton's work has such a well-established reputation that it does not stand in need of any recommendation. Ever since its first appearance, it has become the highest authority in the English language; and that it is able to maintain the enviable position which it has taken, the rapid exhaustion of the different successive editions is sufficient evidence.

The present edition, which is the fourth, has been thoroughly revised and enlarged by the incorporation of all the many important advances which have lately been made in this rapidly-progressing science.

Injuries of the Eye, Orbit, and Eyelids, their Treatment and Remote Effects. By Geo. Lawson, F.R.C.S., Eng. Assist. Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and to the Middlesex Hospital; Late Assist. Surgeon, Rifle Brigade. With numerous illustrations. Phila.: H. C. Lea. 1867. 12mo, pp. 408.

The welcome which this book has received across the Atlantic, has induced its republication in this country, and that it will be equally well received by us, there can hardly be a doubt. The work comprises a collection of all the more important and frequent injuries of the eye, selected evidently with great care, most of them being typical in character. All the different important operations for the removal of deformities and the like, occasioned by injuries, are succinctly described, and most of them elaborately illustrated. Although evidently intended for the specialist, the work will be found of special value to the practical surgeon, to whom ample directions are given for the performance of most, if not all, the necessary operations. Very many of the cases are unique in character, and all are interesting, and as a majority of them make their first appearance in print, a special practical value is thereby given to the work. Every one who consults this *brochure* will arrive at the conclusion that the author has performed a very useful task excellently well, and has spared no pains to dish up for his readers a pleasing variety of cases, each of which has its own practical value. The numerous well-executed illustrations serve to add to the interest of the work, as well as the addition in the latter part of the volume of the test types of Jaeger, of Berlin

Diagram Showing the Effects of the Meteorological Influences on Mortality in the City of New York, 1866. Arranged by Wm. Faulds Thoms, M.D., Physician to the N. Y. Dispensary, Surgeon to the Eastern Dispensary, etc. Wm. Wood & Co. 1867.

This chart, with a surface of only one and a half square feet, represents a deal of careful compilation, and addressed as it is to the eye, conveys to the mind at a glance the various relations to each other of rates of mortality and temperature as influenced by barometrical bearings and points of humidity. The perpendicular lines divide the diagram into months and weeks, while the horizontal are used as a scale for mortality, temperature, etc. The waved lines, stars, and figures, indicate the variations in the meteorological influences and their effects on the mortality. For example, the record for the week ending July 31st (29th week), shows the interesting fact that the mortality rate is greatly increased when high temperature is combined with low mean humidity. We find, too, that during the cholera epidemic the barometer was relatively lower than usual; that westerly winds, and vernal rains, barring perhaps the element of coincidence, slightly increased the death returns. During autumn, however, falls of rain appear to exert quite a contrary effect. Deaths, too, are less frequent when the thermometer ranges between 60° and 70° Fahrenheit, the barometer being at 30.00 inches, and the mean humidity between 60° and 70° (taking the point of saturation at 100).

A noticeable feature about the plan of arrangement is the facility of comparison between any given year, month, or week, thus making the science of meteorology thoroughly practical.

The Medical Use of Electricity, with special reference to General Electrization, as a Tonic in Neuralgia, Rheumatism, Dyspepsia, Chorea, Paralysis, and other affections associated with Debility. By Geo. M. Beard, M D., and A. D. Rockwell, M.D. New York: Wm. Wood & Co. 12mo, pp. 65.

This book has appeared in substance in our columns during the past few months. We assume, however, that this constitutes no valid objection to our notice of it, as independent reviewers. The subject is an interesting one, not only as regards the agent employed, but as to the diseases treated. Looking back at the long but not glorious career which "electricity in the cure of disease" has seen, we are not inclined to envy our authors, in their attempts to rescue it from the ways of quackery, into which it seemed to have almost hopelessly fallen. Yet Doctors Beard and Rockwell seem to appreciate their position as pioneers, as an extract from page 12 will show: "It is the duty, and should be the delight, of scientific men, to wrest the medical employment of electricity from the hands of these selfish harpies, and accord to it that honor to which its merits justly entitle it." This misuse of valuable assistances in diagnosis and cure, is a common thing with us, where medical men may be easily superficially educated, and where they are very often ready to throw distrust and reproach upon a subject which they do not understand. The only way to drive out quacks is to educate the profession on every point, up to the possible results from any agent in cure, minute investigation, or aid in diagnosis.

If this little book opens the eyes of the profession to what electricity is, the peripatetic and self-constituted professors of magnetism will soon find their occupation gone.

There is an "explanation of terms" in the beginning, which clears away some of the fogginess about the subject of "galvanic battery, the quantity, intension, or tension of electricity, galvanization, faradaization, the ascending and descending current," etc. We think, however, that our authors would have done better had they left faradization as Duchenne gave it to us; simply because, whether properly used or not, it has been generally employed, and medical men do well, as a rule, to leave etymology alone; but this is a small matter.

The causes of the ill success of physicians in using electricity are very graphically given. The gist of it is, that physicians, often like the laity, expect means of cure to act in a miraculous sort of a way, and not as the result of their careful and conscientious use, in the hands or under the immediate observation of the medical attendant. We have had so much experience in combating this kind of an unexpressed but entertained opinion, among our medical brethren, in another field, that it is with warm feelings we see the principle that it is not the means used, but the way of using them, which does the good, so clearly stated as in this *brochure*.

The hand is preferred as an electrode. "No instrument that human skill shall devise can ever equal the hand in flexibility and power of adaptation."

Although the cases related take up quite a large portion of the book, we are by no means inclined to regard them as the most valuable part of it; but so far as they go, they seem to show that whatever general electrization may do, it avails much as a *tonic*. Carefully and thoroughly employed, it will undoubtedly save much drugging, and relieve cases which must else go unbenefited.

In the rapid sketch of the book which the state of our columns makes necessary, we can say no more than that it seems to be the entering wedge toward the more thorough laying open of the important subject of which it treats. We trust that before many years, the authors will give the profession the further benefit of their studies and practice. We are fully aware of the valuable contributions of Professor Wm. A. Hammond to our therapeutical knowledge of electricity; but the book of which we have been speaking is so obviously different in its scope from their record of investigations, that we attempt no comparison.

The authors are among the first, if not the very first, to call attention to the tonic properties of general electrization. If they never do anything more, they have done a great work, opened a large field which is yet to be carefully cultivated.

THE CRIME OF INFANTICIDE is increasing in France; and on this account the juries who are called upon to deal with these offences have recently found their verdicts unaccompanied with any allusion to mitigating circumstances. Thus at the assizes of the Gironde a young woman of 25 has been condemned to five years' imprisonment, with hard labor, for throwing her new-born infant into the river; and another woman has been sentenced to eight years' penal servitude at Strasburg for disposing of her child down a water-closet. At the assizes of Saône-et-Loire a girl of 18 was committed to prison, with hard labor for seven years, for burying her child alive.

Correspondence.

THE INTERNATIONAL MEDICAL CONGRESS.

TO THE EDITOR OF THE MEDICAL RECORD.

PARIS, Sept. 9.

SIR—Now that the International Medical Congress has come to an end, it may not be inappropriate to review its proceedings, and endeavor to form an estimate of its results.

This task cannot fail to disappoint. It is acknowledged on all hands that the Congress was ill-organized, the programme arranged without sufficient tact, and the legitimate aims of the discussions almost entirely lost sight of. Evidently the great advantage to be gained by the discussions of an assembly of physicians from all parts of the world would be, that the contingent of information furnished by each should represent something peculiar to his country or school. Data, often painfully gleaned from the records of travellers, would be collected in abundance by medical observers resident on the spot, and offered to enrich the common treasure. Moreover, celebrated men, who had hitherto talked to each other across seas, and through the medium of books, would meet face to face, would familiarly converse with each other on the mighty labors by which their names, their fatherland, had been rendered illustrious, and derive mutual refreshment from the rare intercourse.

All this I say might have been expected. But the expectation has been very imperfectly fulfilled. In the first place only inadequate provision was made in different countries to send such men as should most justly represent the actual condition of national science. There should have been official delegates from the principal universities, who should have been distinguished from the crowd of mediocrities who might choose to attend, but who should not be mistaken for such representatives. From lack of such precaution, a multitude of opinions were advanced which were entirely undeserving the sanction of so solemn an occasion as this professed to be. Any one could speak, and any one did speak; and, as a rule, the more distinguished visitors held their tongues.

Not a word from Virchow or Graefe, who were both present; not a word from Bennett or Simpson. Indeed only two Englishmen are on record as having spoken, and not a single American. The debates were chiefly maintained by the French and Italians. This was probably in part owing to the very imperfect knowledge of French that prevails among us Anglo-Saxons, especially the Americans, and which, as I have had quite frequent occasion to observe, seriously interferes with the benefit they are able to derive from a few months' visit to Paris. But the silence also resulted, in all probability, from the fact that few had prepared themselves for a sufficiently long time in advance; as a consequence, the topics for discussion were developed in the most unequal and irregular manner. The minute anatomy of tuberculosis occupied two or three sessions, in which nearly all the speakers were French, who revived old disputes without reporting any researches made especially for the Congress. On the other hand, the three questions that seemed most peculiarly adapted for international discussion—the influence of various climates upon menstruation; the problem of acclimation; and the influence of alimentation—were only touched upon in the most cursory manner. As a whole, therefore, the Congress cannot

be said to have arrived at any valuable result. Nevertheless, two of the discussions—on the treatment necessary to prevent purulent infection after surgical operations, and on measures to be recommended to the governments of various countries to arrest the spread of syphilitic diseases—were exceedingly interesting; and in all the *séances*, various topics were incidentally developed that are quite worth recording. I shall endeavor to mention some of the principal, beginning with those which occupied the least time and attention.

The communications made on the subject of alimentation were, in accordance with the programme, all written in reference to pellagra. M. Bouchut has found on grains of wheat spoiled by the damp, a fungus very similar to that found in the same circumstances on the maize, to the consumption of which pellagra is generally attributed. He proposes to name this fungus *sporisorium tritici*. To obtain it, it is only necessary to place some wheat in a jar, and keep it damp.

M. Demaria believes that pellagra is not dependent on an accidental poisoning, but is a constitutional neurosis, dependent on hereditary influences and poor food.

The communications of M. Dropsy, of Cracovia, concerning the Polish Jews, and Mr. Kingston on the Anglo-Canadians, presented in the course of the discussion on tuberculosis, touch on a subject of more widely spread interest than the poison of the maize. Each tends to prove the enormous influence of animal food upon the preservation of health, especially from the ravages of phthisis. At Cracovia, the peasants are all healthy and robust, living much upon animal food. The Jews scarcely spend more than two sous a day for their nourishment, and never eat meat. Consumption makes such ravages among them that the race threatens to die out. In the same way in Canada, the French Canadians, who eat meat in excess, often three or four times a day, are declared by Mr. Kingston (an Englishman) to be a superb race of people; while their English neighbors, who live much more soberly, are infinitely more subject to tuberculous disease.

The question of acclimation was as much restricted as that of the influence of food, being limited to the investigation of the conditions necessary for acclimating Europeans in warm countries. M. Simonot read an interesting memoir on the subject. For him the difficulty did not arise from the heat of the climate, but the poisonous influence of miasm. Wherever that could not be destroyed, it was useless to expect to make permanent homes for white families.

M. Lombard, not adhering strictly to the question, communicated the result of researches on the laws of mortality in Europe, according to atmospheric influences. According to these, winter and spring is the most sickly season for all the north and centre of Europe, while the southern countries enjoy their excess of mortality in summer and autumn. In Europe, miasm still continues to be one of the most powerful agents influencing mortality, and it is an agent which in this country it is in the power of man to remove.

A number of carefully prepared memoirs on the question of menstruation were communicated; but, as most of them consisted mainly of statistical tables, they could not be read. The statistics that *were* read, by M. Lagneau and M. Joulin, accord very well with the established law, in virtue of which menstruation is known to be precocious in warm climates, and retarded in cold. In English India, the average age for the establishment of puberty is twelve years and six months. In Norway, sixteen years and four months. The supposed differences between different cities of France is shown to be trifling, Marseilles being only six months earlier than Paris.

Mr. Robert Cowie has made some curious researches upon menstruation in the Shetland Islands, and its connection with longevity. In this locality the menses are established at the same age as in Great Britain, while the *ménopause*, instead of occurring at forty-five or forty-six years, is deferred to a period varying from forty-eight to fifty-four years, fifty-one being the average. In connection with this, Mr. Cowie notices a considerable difference in the rate of mortality, as shown by the following table:

	Shetland Islands.	*Scotland.*
Above 70 years	= 33.55 per 100.	18.25 per 100.
" 80 "	= 20.00 "	7.05 "
" 90 "	= 5.03 "	1.00 "
From 95 to 105 years	= 2.68 per 100.	0.29 "

The discussion on tuberculosis was divided into three parts, severally referring to its pathological anatomy, its prevalence in different climates, and its treatment. Of these, the first received much the most attention, not because of its superior importance, but because it happens to be extremely *à la mode* at the moment, and more speakers had something to say on it. The debates touched on the following questions: First, the specificity of the tubercle; second, its identity with the products of inflammation; third, the precise seat of the granular deposit; fourth, the relation of the yellow degeneration to the gray or crude tubercle; fifth, and finally, two or three peculiar and rather bizarre opinions were advanced which had no relation with any of these points.

The question of the specificity of the tubercular deposit may be variously regarded. A special anatomical element may be sought, as characteristic of tubercle, but such an attempt was universally pronounced to be chimerical. On the specific character of the tuberculous product, either the gray or the cheesy may be attacked or defended, together or separately. Such a combat occurred, and was marked by a diversity of arguments, in support of a diversity of theories. Professor Crocq of Brussels, and M. Lebert, assimilate completely the tuberculous process to the inflammatory. M. Crocq began by declaring that the cellules of the gray granulation could be compared to nothing but the cellules of the lymph and lymphatic glands, the white globules of the blood, of mucus, and of pus; in other words, leucocytes, among which he did not hesitate to class them. In the granulations, these leucocytes are distinguished from pus, chiefly by the absence of intercellular substance; are small, because bathed by no liquid, and have only a single nucleus, on account of their low vitality. These leucocytes arise from the epithelial cells, or those of the connective tissue, and submit ultimately to fatty degeneration, etc.

The phenomena successively exhibited in the formation of these leucocytes, are identical with those of the cellular elements of inflamed tissues. When an organ is examined in which tubercles are developing, it is found strewn with vascular patches. Sometimes the centre is already consistent and elastic, and at this centre the tubercle is gradually formed by exudation, since vascularization and repletion of the tissues by matters destined to be exuded, is common to inflammation and tubercular formation. Moreover, in inflammation the cellular elements absorb new material, swell, become opaque, and finally give birth to new generations of cells similar to the leucocytes. These, either in the tubercle or inflammation, have four destinations. First, they are destroyed, and their materials reabsorbed; second, they are transformed into new connective cells; third, they swim in an intercellular liquid, and constitute pus; fourth, they undergo the fatty degeneration.

It results from these considerations (concludes M. Crocq), that tuberculization is by no means a specific disease, recognizing a vice of the blood for cause, but an affection of the same order as inflammations, and should be combated, like other phlegmasias, by antiphlogistics and revulsives.

Lebert's views are substantially the same, but are based on inferences derived from certain experiments made upon animals by injections of various substances under the skin. In eleven instances were used the products of chronic pneumonia, chronic adenitis apparently tuberculous, and tuberculous granulations of the lungs; two experiments with injections of pus; nine, the products of expectoration and of pulmonary caverns; ten injections of charcoal or mercury were made into the jugular vein.

The charcoal produced little *emboli*, followed by cellular hyperplasma, little granulations, and even multiplication of the epithelial cells and those of the connective tissue. The mercury provoked, besides, an inflammation of the vessels; here also, however, cellular hyperplasma, in the form of little granulations, and, when the irritation had reached a high degree, formation of solid inflammatory foci which ultimately suppurated and produced caverns.

The inoculation of morbid products excited a more severe local irritation, and also numerous granulations in different organs.

Hence, for Lebert, the tubercle strictly resembling the granulation thus artificially created, is a product eminently hyperplastic, and cannot be classed with accidental products properly so called.

After this exposition of the pure inflammatory doctrine of tuberculization, Hérard and Cornil rushed to the defence of their theory, which may be called modified inflammatory. For them, the gray granulation is the only characteristic lesion of tuberculosis which excites an inflammation, whose degeneration constitutes the so-called cheesy tubercle. Neither of these champions undertook the task of rebutting the views of Crocq or Lebert, but each addressed himself to that side of the doctrine which touched upon, and was contradicted by, that of M. Villemain. This physican has recently made some remarkable experiments on the inoculation of tubercle, and has succeeded in thus conveying the disease to rabbits. So far, his experiments tended to confirm (at least without the criticism afforded by those of Lebert) the doctrine of the specificity of the tubercular deposit. But, proceeding further, he professes to have obtained gray granulations, after inoculation with the yellow cheesy matter. In consequence of this, he renounced the views he had previously held in regard to that substance, and, no longer believing it to be a secondary inflammation, he concluded it to be a more advanced stage of the crude tubercle, thus returning frankly to the ideas of Laennec. Hérard replied that this cheesy pneumonia (*pneumonie caséeuse*) might be sufficiently stamped with the character of the granulation by which it was caused, to serve as material for infection; but such did not prove that it was identical with the granulation which could often be found in its midst, little changed.

M. Cornil attacked Villemain on another point, namely, in regard to the *seat* of the granulation. Villemain, in a memoir of some length, read at the first session of the Congress, declared that the greater number of granulations occupy the air-vesicles, herein again coinciding with Laennec. At the beginning of his researches, he had considered the contents of the alveoli as a product belonging to the pulmonary epithelium, and distinct from the granulation, which is the view actually held by Hérard and Cornil. But subsequently, M. Villemain became convinced that the membrane of separation between the alveoli was not homogeneous, but contained a special element identical in structure with the connective tissue. In this tissue were deposited the greater number of the granulations. He considers the existence of an epithelial layer at the internal surface of the alveoli to be extremely problematical.

Hence, he does not believe that the elements constituting the catarrhal or cheesy pneumonia are derived from epithelial cells, but from the nucleated cells of the membrane separating the alveoli. Being much crowded, these cells sometimes assume plane surfaces from pressure, so as to resemble epithelium; but they are never soldered together.

M. Villemain admits that the initial stages of tubercle resemble those of inflammation, inasmuch as the two external zones of the three that constitute a tuberculous nodosity, represent cells in different stages of development; but the two processes are to be distinguished by the terminations, which for inflammation is pus, for tubercle fatty degeneration. The similarity between the anatomical elements of these two states is, as M. Villemain justly thinks, no reason for identifying them.

M. Cornil denied point-blank that the tubercle was developed anywhere but in the lymphatic or adventitious tunic of the blood-vessels, especially at their bifurcation. This phenomenon (in tuberculization of the pia mater) is accompanied by two others: 1st. The multiplication of similar elements in the connective tissue of the pia mater which surrounds the diseased vessel; 2d. The coagulation of the blood, and the retrograde metamorphosis of the fibrine and blood-globules.

Cornil admits that in the lungs there is a development of elements in the interalveolar membrane. But, besides, he insists that the large pavement cells, perfectly free, measuring 0.015, are really epithelial, and cannot be confounded with the elements of the connective tissue, which are small, 0.004, agglutinated, intimately united by a homogeneous and granular substance. The first constitute the tuberculous pneumonia; the second the granulation.

A Hungarian physician, Dr. Bakody, warmly supported the views of Cornil. He moreover suggested that the tubercle developed especially in the summit of the lungs, because there the respiratory movements are less extensive, and the lungs cannot readily reject the mass of cells which form in the alveoli in consequence of inflammatory irritation.

The question concerning tuberculization in different countries and circumstances was then taken up. M. Marmisse read a memoir upon the influence of this disease on the mortality at Bordeaux. The influence of hygienic conditions is indicated by terribly eloquent figures Among 1,000 poor people registered at the *Bureau de Bienfaisance*, 625 die of phthisis, while the rich classes only yielded a tribute of 87 on 1,000 to this formidable disease.

I have already quoted M. Dropsy's remarks on the Jews in Poland, and Mr. Kingston's on the English in Canada. Dr. Homan, of Christiania, read a memoir on the disease in Norway, and its distribution in different sections of the country. The proportion of deaths from tuberculous diseases in Norway is about 162 in 1,000. The variations in different districts are from 79 to 226 per 1,000. Sometimes a great difference is observed between two neighboring districts, which cannot, then, be referred to difference of climate. Dr. Homan invokes syphilis as a powerful agent to explain this difference. The capital question of the treatment of phthisis received no new light.

I must not forget to mention, among the opinions independently broached, that of M. Empis, who invents a new disease called *granulic*, distinct from tuberculosis; and of a physician whose name escapes me, who declares the cause of tubercle to be excessive pressure in the blood-vessels, whereby the colloid matters in the blood are exuded in the form of granulations.

The second great question, on the prevention of accidents after surgical operations, was developed with much animation. Two principal opinions obtained: one the perfect efficacy of local treatment, the other the importance of minute constitutional care.

One of the most interesting memoirs read in support of the first theory was that of Professor Bourgade, of Clermont-Ferrand, on the employment of perchloride of iron. The capital fact from which the Professor reasons is the different effect produced by wounds made with a bistoury or with caustic. The latter are habitually innocuous; the former often followed by serious accidents of infection. Some surgeons have sought on this account to substitute the caustic for the bistoury; but that is impossible in a large number of cases, and the bistoury will always remain the surgical instrument *par excellence*. The problem is, therefore, to reduce the wound made by it to the same conditions as that produced by the caustic. This, according to M. Bourgade, is accomplished by means of the perchloride of iron, which combines intimately with the tissues, and forms over the wound a kind of magma solid and adherent, a species of plastic cuirass, which resembles both a coagulum and an eschar, which becomes hard and resistant, and only begins to separate by suppuration, the sixth, eighth, or tenth day after the operation. The following is the method for its application: When the operation is finished, and the arteries suitably tied, the wound should be washed and dried with the greatest care; and when the flow of blood is well arrested, the whole surface is covered with lint saturated in a solution of perchloride of iron at thirty degrees. It is essential that all parts of the wound, bones, muscles, cellular tissue, etc., receive the direct action of the liquid. The whole is covered with moistened lint.

When the tampons of lint fall, they show a blackish surface, covered with a thin eschar, which gradually detaches itself, revealing a pink wound in very good condition, already covered with fleshy granulations.

This method, of course, is only adapted to wounds uniting by second intention; but, in M. Bourgade's opinion, that is the only union possible in hospitals. Several surgeons expressed the opinion that the attempt to obtain union by first intention was rapidly being abandoned. The perchloride has been applied in 95 operations, all followed with success.

The accidents that are guarded against by the perchloride are more especially purulent and putrid infection, phlebitis, angeioleucitis, osteomyelitis, and consecutive hæmorrhages.

The perchloride is supposed to act by a light cauterization of the bleeding surfaces, and by effecting a solid coagulation even in the interior of the veins. There results an adhesive and obliterating phlebitis, which prevents the suppurative phlebitis, and opposes the absorption of morbid elements.

M. Barbosa, delegate from the Portugal government, read some extracts from an important statistical memoir on the operations practised for the last twelve years in the hospital St. Joseph, at Lisbon. They were quite favorable—only 59 deaths among 243 amputations of limbs; among these, 62 amputations of the thigh, which gave 29 deaths.

M. Barbosa lays great stress upon the good hygienic conditions of the wards, ventilation, and cleanliness. He adopts the circular method for amputation, and always dresses the wound with lint dipped in alcohol saturated with camphor, an ancient custom in Portugal.

Professor Gosselin followed Barbosa in attaching much more importance to these circumstances of hygiene than to the local dressing. He takes especial pains with the *morale* of his patients, endeavoring gradually to accustom them to the idea of the operation, allowing them, whenever it be possible, to name the day, always securing them from pain by the use of chloroform, etc. He is also careful to remove the patient as far as possible from cases of erysipelas, etc., which, unfortunately at La Pitié, cannot always be very far. After the operation, he is especially careful to avoid doing anything to cause pain. Never places any apparatus on the stump which will render it necessary to lower or raise it; does not attempt to draw together the edges of the wound, and rejects the use of alcohol in the dressing to avoid pain; places the patients on a mechanical bed, which allows them to be moved without suffering. By these precautions, out of 48 amputations he succeeded in saving 29 patients, a mortality of 39 on 100. Of the 19 deaths, 10 only were by purulent infection.

As an instance of the disastrous influence of moral shock, M. Gosselin cites the case of a patient who was doing well, when he heard that his wife had become insane and was at the Salpetrière. Very soon afterward he began to shiver, and fell a victim to purulent infection.

M. Verneuil, the distinguished surgeon at Laribosisière, especially occupied himself with the consideration of the previous health of the patient. The influence of diseases, manifest or latent, of the kidneys and lungs, of drunkenness, miasm, etc., is constantly proved by the unfortunate results of the best conducted operations. M. Verneuil thinks that erysipelas more frequently occurs in individuals with the herpetic or arthritic diathesis.

M. Labat attached less importance to previous or coincident diseases, and agreed with M. Bourgade in the attention needed for the local conditions of the wound. He lays down several rules as follows:

1. Never attempt to obtain immediate union except when the wound is shallow, the texture of the tissues uniform, the opposed surfaces can be maintained in contact as well as the edges, and the tissues have not been too profoundly bruised.

2. Carefully avoid all conditions which may lead to the alteration of the fluids, and their sojourn near the mouths of the veins.

3. Favor the draining of fluids by a tube or other means, establishing a canal from one end of the wound to the other.

4. Avoid the employment of all irritating substances, especially in regions abundantly provided with lymphatics.

5. In anfractuous wounds, fill up the anfractuosities with lint, so as to avoid the accumulation of fluids.

6. Preserve the limb as immovable as possible, and avoid too frequent dressings.

7. Abstain absolutely from the application of pure water on the wound; always use alcohol.

8. Whenever there is reason to fear purulent absorption, give ergotine in the dose of two to three grammes from the first day, and continue as long as the danger lasts, usually ten or twelve days.

A distinguished professor from Rome, M. Mazzoni, pointed out the necessity of isolating the surgical wards from those containing fever or tuberculous patients, a precaution hardly ever adopted in French hospitals; but at Naples, Professor Palasciano did not hesitate to

tender his resignation when the attempt was made to approach a fever ward near that of his operated patients. M. Mazzoni asserted the comparative immunity of the Italian hospitals, even the maternities, from erysipelas and puerperal fever, in all cases except where the usual precautions to exclude patients affected with fevers or other contagious diseases, or with tuberculosis, are for some reason neglected.

Mr. Meric, of London, also claimed for the English hospitals the merit of great attention to this point, and ascribed to it much of the superior success of English surgeons in ovariotomy.

But sometimes the most lively debates of the entire Congress were excited by the question of syphilis, and its means of prevention by legal measures. With the exception of Dr. Drysdale of London, and one other physician who wished to oppose moral education to the extension of the frightful evil, it was everywhere assumed that the only efficacious measures consisted in strict surveillance over prostitutes. In proof of the results obtained by this means, several members read elaborate memoirs. The first was sent by M. Wleminckx of Brussels, who pronounces that to be the best regulated of cities in this respect. All the registered public women are examined every three days, and punished if they fail to present themselves for examination. Upon the slightest suspicion of disease they are sent to the hospital. All physicians are forbidden to treat prostitutes at their houses. Rewards are offered to such women as present themselves regularly for examination. By means of these precautions, M. Wleminckx asserts that the number of syphilitic diseases has very considerably abated, and secondary and tertiary affections have nearly disappeared.

In addition to these measures applied to women, in military hospitals all syphilitic patients are rewarded if they will denounce the person from whom they have contracted the disease.

M. Crocq, also from Belgium, observed that these measures, so efficacious in the great cities, were neglected in small villages, which served as places of refuge for clandestine prostitution, and were indestructible foci of syphilis.

M. Rollet, in the name of the Imperial Society of Medicine at Lyons, advocated not only surveillance of the women, but of all men in situations where their conduct could be controlled, as soldiers, sailors, etc. In view especially of the terrible accidents recently occurring at a large glass factory, where the workmen being compelled to apply their mouths successively to the same tube, nearly all contracted the disease from one whose mouth was the seat of syphilitic ulceration, M. Rollet recommends the extension of this surveillance to the glass-blowers also.

M. Buchon made a report of the measures actually enforced in the French navy. Every sailor or soldier is submitted to an examination, previously to the arrival of the vessel in port, and none are permitted to go on shore without a certificate of perfect health. Same precautions before leaves of absence are granted. Thanks to this incessant surveillance, which although of ancient date has been especially vigorous since 1830, the navy department has greatly diminished the number of syphilitic patients admitted into the hospitals. At Brest, where the hospital formerly always contained three hundred beds of such patients, the number has diminished to one hundred.

M. Le Fort presented some statistics concerning the actual state of prostitution in Paris. The total number of registered prostitutes is 3,851, of which 1,306 are distributed among one hundred and sixty-five houses —the rest are isolated. The amount of clandestine prostitution is enormous, but cannot be estimated. All soldiers treated for the disease are compelled to reveal its source, and the police pursue the woman. A certain number of girls are arrested every day for clandestine prostitution; among 13,818 of this category, 3,728 were found to be diseased, 1,131 were sent to St. Lazare, 7,217 reclaimed as minors by their families (!), 1,549 only were registered.

In six years, 504,000 examinations have been made with the speculum upon prostitutes, and 3,720 contagious diseases have been thus discovered. This number is small in comparison to the number of examinations, but considerable in proportion to the number of prostitutes registered.

In spite of all this surveillance, as Mr. Drysdale of London remarked, syphilis is not less frequent in Paris than London, where prostitution receives no sanction from authoritative surveillance.

The question that really excited the Congress almost to a flame, was that of the possibility of preventing syphilis by inoculation. It is unnecessary to record the debate in which M. Ricord quite overbore M. Auzias-Turenne, who enthusiastically advocated such inoculation. Several very disastrous and even fatal diseases were reported by those who adhered to Ricord's doctrine, as the consequence of inoculation with the hard chancre. The discussion had no especial result.

Complementary sessions were held from time to time in the evening, in which various interesting subjects were suggested or debated. I have already overpassed my space, but must mention two communications of real curiosity.

The first is the exposition, by M. Brunetti, of a new method for preserving anatomical pieces. His preparations have been on exhibition at the Exposition, but the process hitherto has been kept secret. In an evening session, however, M. Brunetti revealed it; and, as I know from personal examination of his preparations, the results are so admirable, that every one should be acquainted with the method.

Several operations are included; the washing of the piece, freeing it from fat, its tanning and desiccation.

To wash the piece, M. Brunetti passes a current of pure water through the blood-vessels and excreting canals; then alcohol to expel the water.

Then ether is made to replace the alcohol in order to dissolve the fat; this process requires several hours. The ether penetrates everywhere, and everywhere accomplishes its work thoroughly. At this point, the piece plunged in ether can be preserved indefinitely before proceeding to further operations.

Then tannin is dissolved in boiling distilled water, and this solution is passed into the blood-vessels, etc., after the ether has been driven out by a current of distilled water.

Then the piece is dried by being placed in a vase with a double bottom, and containing between the two, boiling-water. By means of a reservoir where the air is compressed to about two atmospheres, and which communicates by a stopcock and a system of tubes, first with a vessel containing chloride of lime, then with another empty and heated, then with the vessels and excreting canals of the piece, M. Brunetti establishes a gaseous current which expels all the liquids. The operation is then finished, and the piece remains supple, light, with its natural size and relations, and all its solid histological elements. The most perfect microscopic slices may be made from the preparation.

The other invention, which is too good, or at least too striking, to be passed by in silence, is an instrument for *Somatoscopy*. This was presented by M. Millot, of Russia, and is designed to illuminate the cavities of the

body, so as to render them transparent to the eye. The apparatus is composed of a glass tube containing a platinum wire curled up on itself, and communicating by copper stems with the two poles of an electric battery. When the current is passed, the platinum wire grows glowing white, and emits an intense light. This tube introduced into the stomach, vagina, or rectum of the cadaver, has enabled the observer to see by transparence the walls of the abdomen. M. Millot made some experiments upon animals before the Congress, but so far he has had no opportunity to test his apparatus on the living subject. He hopes, however, by its means to bring great assistance to the diagnosis of tumors of the ovary, and even adherences, and also of calculi and tumors of the bladder. P. C. M.

THE ADMINISTRATION OF CHLOROFORM BY THE VAPORIZER.

To the Editor of the Medical Record.

Sir—Permit me respectfully to submit to the consideration of your readers a few remarks on chloroform, and a new method of administering it as an anæsthetic.

The ordinary way of giving chloroform as an anæsthetic is objectionable on account of the deleterious effects of the carbonized air formed within the inhaler by the respiration of the patient. An absorption of the carbonic acid gas into the system, either alone or with chloroform, causes various degrees of toxicological effects. These do not always depend on the quantity of the poison thus taken; but are much owing to the condition the poison finds, that *nerve power* which ever shows its resistance to all agents that are enemies to the integrity of the body. In this toxico-physiological struggle, so to speak, either the one or the other will triumph, resulting either in the death or recovery of the patient. If our premises are correct, we have a clue of the causes of death from the effects of chloroform, in cases where no known disease exist in the patient, that are considered incompatible with the condition of chloroformic anæsthesia.

To lessen danger in giving chloroform by inhalation, I have lately used the spray in such a way that the vapor is received into the lungs highly oxygenated with atmospheric air. This is accomplished by the use of an elastic air-pump, attached to a dental spray instrument. The spray of chloroform is forced into an inhaler, which is a cone made of a towel, giving it firmness, and in a measure making it impermeable to vapor by pinning several layers of writing-paper around it. The inhaler with this arrangement is put over the patient's nose and mouth, and as the spray is pumped into it, it is received by inhalation. The action of the spray may correspond to each inspiration of the lungs. By this method of administering chloroform but little is required, and its effects are highly satisfactory. I am firmly impressed with the belief, that this mode of etherizing patients is accompanied with no more danger than there is in the use of the nitrous oxide gas.

On the 13th day of August, 1867, I extirpated, at Coxsackie, New York, a mammary cancerous tumor from Miss E. J. S. My assistants were Drs. Williams, Spoor, and Jackson. The patient was of plethoric habit, and was prepared for the operation by aperients and low diet. Twenty minutes before administering the spray we gave her an ounce of brandy. The anæsthetic given in the case was a mixture of equal parts of chloroform and sulphuric ether. The patient, in a few minutes, was gradually and promptly brought under its full influence. The operation was completed, and Sims' sutures inserted as the patient merged into consciousness. The amount of chloroform used in this case was one teaspoonful, or one tablespoonful of the mixture. The effects of the anæsthesia were of short duration, and the wound healed almost by the first intention.

G. P. Hachenberg, M.D.

Hudson, N. Y., Sept. 16, 1867.

THE LIQUOR ZINCI CHLORIDI IN GONORRHŒA.

To the Editor of the Medical Record.

Dear Sir—My attention was called this morning to the following paragraph in Dr. Bumstead's work on venereal diseases: "The chloride of zinc is a powerful caustic and irritant, which fulfils, although in a much less perfect manner, the same indications as nitrate of silver, and may, therefore, be used under similar circumstances." "It is a favorite injection with some practitioners, especially with my venerable friend Dr. J. P. Batchelder, who employs a very strong solution in all stages of gonorrhœa, and states that but few cases resist more than a week. Dr. B. dissolves 3 ij of the chloride in 3 iij of water, and directs the patient to commence with three drops of the mixture to a tablespoonful of water, and inject three times a day; to add a drop at a time (rarely exceeding eight drops) until a smarting sensation is produced, and then gradually to diminish the strength until the discharge disappears." This paragraph contains a most singular mistake or misunderstanding in regard to my use of the chloride of zinc in gonorrhœa. I do not in fact recollect ever having prescribed it in any case whatever, except as a caustic in cancerous affections. My injection in gonorrhœa is simply six drops of the liquor zinci chloridi to an ounce of water—the injection to be made three times a day, the strength of the injection to be regulated by the effect produced, a slight uneasiness only being desirable. The discharge usually disappears in the course of three or four days. I generally, however, advise the patient to inject cold water as he did the injection proper for several days. The cure is usually accomplished in five or six days from the commencement of the treatment; and I may add that patients treated in this way are rarely affected with chordee, and seldom require any internal remedy.

J. P. Batchelder.

New York, Sept. 26, 1867.

THE DISCOVERER OF ANÆSTHESIA.

To the Editor of the Medical Record.

Sir—A recent article in the Medical Record, on the discoverer of anæsthesia, does not seem to me to reach the true point at issue; and much of the discussion of the respective claims of Drs Morton, Wells, and Jackson, is irrelevant, from failure to understand just what those claims are. Knowing Dr. Morton well, and what he does claim, from personal conversation, I ask your indulgence of a limited space in reply.

Dr. Morton does not claim to be the discoverer of sulphuric ether, or of the principle of anæsthesia—nor does Dr. Wells. Local and general anæsthesia (*ana* without, and *aisthesis*, feeling, or consciousness), has been known for centuries, and signifies in its professional application a condition in which operations may be borne without pain or consciousness of suffering; it refers to a class of agents by which pain is relieved, and susceptibility to it suspended; thus opium and other narcotics, cold locally applied or in its general effects, alcohol to the extent of complete insensibility, have all been long employed for anæsthetic purposes.

nitrous oxide gas was long known to the profession, and its peculiar properties vaguely understood; but it is granted by all familiar with the discussion, that Dr. Wells was the first to make a practical application of its *anæsthetic property* in the extraction of teeth—and the honor let none take from him—but here he stops; a hint, taken from the accidental injury of Mr. Cooley while under its influence, suggests the idea of extracting teeth without pain; the experiment succeeds, and since then has been constantly employed. This is not the *discovery* of nitrous oxide—nor is it the discovery of anæsthesia! Mr. Colton employed it long before—it is the practical application of the gas, as a feasible agent, by means of which teeth may be extracted without pain; beyond that it has never been carried. Its effects are too fugitive to admit of severe surgical operations under its influence; here was the fault—and here Dr. Morton introduces sulphuric ether, having tried it upon himself and others, claiming for it what could not be claimed for nitrous oxide gas, or any other known agent, the power of inducing insensibility long enough to admit of severe surgical manipulations.

Dr. Wells did not discover nitrous oxide—but he did conceive the idea of its employment as an anæsthetic. Dr. Morton did not discover sulphuric ether—but he did discover, by long experimentation, properties which others knew nothing of, and giving them to the world, became one of its grand benefactors.

Great discoveries are not stumbled upon often; patient thought, long and close investigation and experiment, are the price of any really valuable advance in science or art. Obstacles constantly present themselves, and deter many. It is only he who has greater faith, and, seeing the clue, follows it out in all its intricacies to the ultimate result, who is the victor. Hints are caught from others unconscious of their value; but to the patient investigator they are as parts wanting in a chain, and seen, are at once seized and worked in in their own proper place, and lo! the chain of induction is complete. Now, what was wanted previous to the discovery claimed by Dr. Morton was, an agent safe in its effects, and which would suspend consciousness long enough to admit of surgical operations. Did nitrous oxide gas meet this want? It was simply an advance by which trivial operations could be performed. It is asserted that Dr. Morton previously obtained whatever he knew of the practicability of anæsthesia from Dr. Wells. Dr. Morton denies this; but grant it as relating to anæsthesia by nitrous oxide, did Dr. Wells originate or develop the principle? It was known long before; and if it is said by way of detraction from Dr. M. that he owes the idea to Dr. Wells, just as true is it that *he* owes the idea to the accidental administration of the gas in his presence. The test of the real value of an article is its practical application to real wants. The gas never met them, and has never been claimed as really valuable in general surgery. Franklin drew the lightning from the clouds—is he entitled to the credit of the discovery of the electric telegraph? No more is Dr. Wells to the honor of this magnificent discovery. Recognizing a want never yet met; grasping isolated facts and arranging them in their proper relations; seizing hints here and there, by patient thought and bold experiment, Dr. Morton announced to the world the discovery of anæsthesia by an agent harmless in its proper careful use, and adapted to the wants of the surgeon. Struggling against incredulity and prejudice, he forced it upon obstinate unbelief; he combatted dogmatic opposition in this country and in Europe from the profession, the pulpit, and the press; and at last, when a reluctant assent was given to its worth, and this changed into grand eulogy of its immense value, his claim is for the first time disputed. The "Report" of Hon. Truman Smith is easily explained when it is understood that he is trustee for the Wells estate, and so is rather a special plea than an impartial scientific document. Scarcely a medical society in this country but has already accorded to Dr. Morton the honor which he claims; and while perhaps, at this late day, no new facts may be adduced, yet a careful consideration of those already presented can scarcely fail to establish his claim in the minds of the profession throughout the country.

I am, sir, truly yours,

J. W. LAWTON, M.D.

SYRACUSE, N.Y., Sept. 4, 1867.

A CASE OF ELEPHANTIASIS ARABUM.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—As cases of *Lymphangitis Chronica*, or *Elephantiasis Arabum*, are proverbially rare, particularly among the German element of our population; and as the subjoined case presents one or two points of interest, the same is respectfully tendered for publication:

Catherine M——, aged forty-three years, wife of a street-sweeper, presented herself on the 19th of June, 1866, at the surgical department of the German Dispensary. Her frame seemed fragile, her countenance cadaverous; when, upon being questioned regarding her malady, two legs of enormous proportions were exhibited, the left one especially being huge and unwieldy.

The disease commenced, without any assignable cause, twelve years ago. Its growth was slow, but steady, for two years, when an invasion of the tissues of the right leg commenced. After the lapse of four years from the first manifestations of the disease, it remained stationary. The following appearance was then presented:

From knee to ankle-joint a smooth mass of tissue, divided into three large swellings, or tumors, separated by excoriations and fissures. On the outer circumference of the first tumor was a flat, granulating sore, which, however, was gangrenous posteriorly.

The dimensions were as follows: circumference at knee, 12½ inches; at knee, above patella, 14¾ inches; of the first tumor, 25 inches; of the second, located at the middle third of the tibia, 24 inches; of the third, near the ankle-joint, 15 inches.

Difficulty of locomotion, and consequent abstinence from many enjoyments, were the only inconveniences for a long period.

During the month of November however, erysipelas, with subsequent ulcerations, and several profuse hæmorrhages occurred, the latter having caused the debilitated condition already mentioned.

As the results which are obtained through operative proceedings are very unfavorable, and as her anæmic cachectic condition contra-indicated any surgical procedure, recourse was had to the *expectant method*.

Accordingly, Dr. L. Voss, who then officiated, directed the gangrenous sore to be dressed with a solution of permanganate of potassa, and exhibited large doses of iron internally.

These, with absolute rest, horizontal posture of both limbs, methodical compression, and the most nutritious diet, constituted the course of treatment.

In March, 1867, she reappeared at the Dispensary, when a few folds of hypertrophied skin were the only remaining traces of a former hideous disease.

Yours truly, DAVID BREKES, M.D.

NEW YORK, Sept. 23, 1867.

THE RUSH MEDICAL COLLEGE, CHICAGO.

To the Editor of the Medical Record.

Sir—Yesterday was a proud day in the annals of medicine. The twenty-fifth annual course of lectures by the Faculty of Rush Medical College was opened in the splendid edifice which has just been completed for the institution. The lower lecture-room was crowded by the alumni, the students, and members of the profession, who were assembled at eight o'clock in the evening, to hear the introductory address. It was the largest gathering of medical men that has ever been seen in the Western States. Upon the platform were the members of the Faculty, the Mayor of the city, and a number of distinguished citizens. One only who should have been present, was invisible—the founder of the college, the famous teacher whom envious death had snatched too early from the scene of his triumphs.

After the usual formal prayer and discourse of sweet music, the President of the College, Prof. Blaney, pronounced an inaugural address, which had for its subject, "The past History of Rush Medical College."

These interesting reminiscences were followed with an appropriate speech of congratulation by the Hon. J. B. Rice, Mayor of the city. The new professor of surgery, Moses Gunn, M.D., was then introduced to the audience, and proceeded to open the course of lectures with an address well calculated to excite the attention and the attachment of his future auditors. After this conclusion of the literary exercises of the evening, Professor Blaney invited the guests of the school to an entertainment which was served in the spacious dissecting-room. Everything was conducted with perfect good taste, and there was nothing that could mar the harmony of an occasion which can never be forgotten by the delighted assembly.

Rush Medical College has now attained its majority. Possessing the finest building in the United States, its exterior attractions alone are sufficient to insure permanent prosperity. The new structure, which was last night so happily dedicated, is built of brick, with an interior facing of white concrete instead of plaster. It has a front of sixty feet on Dearborn street, by seventy-two on Indiana street, and its height is sixty-six feet. The old building, which measures thirty-two feet by seventy, is immediately adjoining, and communicates with the new. In this edifice are the chemical laboratory and the dissecting-room. The lecture-rooms fill the whole length and breadth of the new building. The lower lecture-room presents an appearance similar to that of the amphitheatre of the College of Physicians and Surgeons, N. Y. It is, however, much larger, and the semicircular tiers of seats rise upon the *panoptic* curve —a great improvement. The ceiling is supported at an elevation of twenty-six feet, by four massive iron pillars. Light and air are freely admitted through windows which pierce three of the walls at the level of the highest row of seats. Above this splendid room is the anatomical theatre, with its seats for seven hundred students. Lighted through the dome from an elevation of fifty feet above the professorial arena, the dim vastness of its depths, as seen last evening, was well calculated to create a profound impression upon the minds of the students who, for the first time, were entering the precincts of *Alma Mater*. Besides these spacious theatres, the building contains a quiz-room, sixteen feet by thirty; the dissecting-room, thirty-eight feet by eighty; a museum, a laboratory, rooms for the professors, a dispensary, the hall of the College of Pharmacy, a hospital ward, the janitor's room, and a cellar for the preparation of anatomical subjects. The edifice is heated by steam, and contains, as we are told, every appliance to make it the most perfect medical college building in the world. All this upon a site which forty years ago was a howling Indian camp-ground. It is wonderful!

M.

Chicago, October 3, 1867.

New Publications.

Books and Pamphlets Received.

Epidemic Meningitis; or Cerebro-Spinal Meningitis. By Alfred Stillé, M.D., Professor of Theory and Practice of Medicine, and of Clinical Medicine, University of Pennsylvania, etc. Philadelphia: Lindsay & Blakiston, 1867. 8vo., pp. 178.

Hufeland's Art of Prolonging Life. Edited by Erasmus Wilson, F.R.S. Philadelphia: Lindsay & Blakiston, 1367.

Transactions of the American Medical Association. Vol. 18. 1867.

Catalogue of the Surgical Section of the United States Army Medical Museum. Prepared under the direction of the Surgeon-General, U.S.A., by Alfred Woodhull, Assistant Surgeon and Brevet Major, U.S.A.

Catalogue of the Medical Section U.S.A. Medical Museum. Prepared under the direction of the Surgeon-General, U.S.A., by Brevet Lieut.-Colonel J. J. Woodward, Assistant Surgeon, U.S.A., in charge of the Medical and Microscopical Sections of the Museum.

Studies in Pathology and Therapeutics. By Samuel Henry Dickson, M.D., LL.D., Professor of Physic in Jefferson Medical College, etc., etc., Philadelphia. New York: Wm. Wood & Co., 1867.

Medical Items and News.

PERSONAL.

Dr Adam Frank, of Philadelphia, has been appointed an assistant surgeon in the navy.

Surgeon James McClelan has been ordered to the naval rendezvous at Philadelphia.

Surgeon C. S. Clebourne has been ordered to the apprentice-ship Saratoga.

Drs. Frank H. Hamilton, Elisha Harris, T. Gaillard Thomas, Theodore Walser, and A. Nelson Bell, have been appointed the Executive Committee at a recent meeting of physicians, and have in charge matters relating to the relief of the Southern yellow-fever sufferers.

Goodyear versus the Dental Vulcanite Company.—An important patent case in Baltimore, of Goodyear against the Dental Vulcanite Company, which was argued last spring, has just been decided in favor of Goodyear.

New Works.—Prof. Geo. T. Elliot, of this city, is engaged upon a work on Clinical Obstetrics, to be issued shortly by the Appletons; and Prof. C. A. Lee, of Peekskill, New York, is similarly occupied with a work on Practical Therapeutics.

N. Y. County Medical Society.—At the anniversary meeting, held October 7th, the following officers were elected for the ensuing year: Dr. E. R. Peaslee, President; John T. Kennedy, Vice-President; Ellsworth Eliot, Secretary; and Wm. B. Bibbins, Treasurer.

The late Dr. Charles E. Morgan.—At a meeting of the Physicians and Surgeons of the Northern Dispensary, convened on Tuesday evening, Aug. 6, 1867, to

express their sentiments upon the sudden death of their esteemed and beloved associate, Dr. Charles E. Morgan, the following preamble and resolutions were unanimously adopted:

Whereas, It has pleased Almighty God to remove from our midst an intelligent, earnest, and Christian gentleman; therefore,

Resolved, That as physicians of this institution we feel the loss of one of the most worthy, efficient, and brilliant members of its medical staff; as his associates, we feel that one is lost to us whose talents, rare medical attainments, habits of patient study, and earnest devotion to his profession, gave promise of a most brilliant and successful career; as friends, we sorrow that we shall no more on earth associate with one whose many good qualities had endeared him to us all.

Resolved, That we will ever cherish his memory, and emulate his example.

Resolved, That a copy of these resolutions be sent to the family of the deceased as an evidence of our sincere, heartfelt sympathy in their deep affliction, and that they be published in the Medical Record, and the *New York Daily Times*.

Everardus B. Warner, M.D.,
Saml. B. Ward, M.D.,
B. F. Dawson, M.D.,
Committee.

(We regret to say that the above preamble and resolutions were sent to us at such a late date, that we have been unable to find a place for them before.—[*Ed.*]

Medical Society of Hudson County, New Jersey.—The regular monthly meeting of this society was held at Jersey City, September 5th. Eight members were present.

On motion, the Chairman appointed a committee of three members to take into consideration the laws of the State regulating the practice of medicine, and inquire whether any statute exists for the protection of the public against ignorant pretenders and unqualified practitioners of medicine and surgery.

The Secretary was requested to have notices of meetings published in the Jersey City and Hoboken papers, and send a synopsis of the proceedings of each meeting to the editors of the Medical Record of New York, and the *Medical and Surgical Reporter* of Philadelphia. E. W. Buck, M.D., Secretary.

The Late Dr. Taggart.—At a special meeting of the Hudson County Medical Society, held at the office of Dr. Varick, in Jersey City, on the 16th inst., the following resolutions were adopted:

Whereas, It has pleased Almighty God to remove from our midst our worthy brother, Dr. Charles Taggart, who for many years was associated with us a member of our Society, therefore be it

Resolved, That this mournful event has deprived us of one whose honorable and generous character had won our esteem, and that while we mourn our loss, we bow in humble submission to the will of God.

Resolved, That a copy of these resolutions be published in the Medical Record of New York, the *Medical and Surgical Reporter* of Philadelphia, and the papers of Jersey City.

T. R. Varick, M.D.,
E. W. Buck, M.D.,
M. A. Miller, M.D.,
Committee.

The Yellow Fever in 1853 and 1867.—The yellow fever in 1853 gradually increased from the week ending July 25 until the week ending August 25, when the deaths ran up from 21 to 1,614. The next week, ending August 28, the number of deaths by yellow fever was 1,486, and the decline then was gradual, until the disease was declared no longer epidemic on the 13th of October. The greatest number of yellow fever deaths then in any one day was 315, August 21. In 1867 the disease has certainly assumed a much milder form. Taken in its earliest stages, and promptly, judiciously, and carefully treated, a great majority of the patients recover. The number of deaths for the week ending August 31 was 126. The number for the week ending yesterday morning was 212. The highest number in any one day this year is 44. The next day the deaths declined to 30, and yesterday increased again to 43. The disease has, we believe, reached its climax. It will, we have no doubt, gradually recede from this time to the close of the season. The lesson of the yellow fever deaths this year should be engraven deeply on the public mind. It is chiefly owing to the neglect of such thorough and effective sanitary measures as were adopted by General Butler in 1862. The late city government shamefully neglected their duty to protect the public health. They embarrassed the city finances to such an extent that the present city administration is crippled, and unable to do what ought to be done to cleanse the city. The canals are abominably filthy, the draining machines are nearly worthless, the contractors to keep the streets clean neglected their duty, and hence the result. There would have been no yellow fever deaths, or but few, if prudence had been regarded in the sanitary management of the city.—*N. O. Republican.*

A Move in the Right Direction.—At a recent meeting of the Presbytery of Troy, held in Glen's Falls, New York, Elder John Lambert, M.D., of Salem, offered the following preamble and resolutions, which, after free discussion, were passed unanimously:

Whereas, It appears, from recent publications by some of the most distinguished physicians and statisticians of our country, and from articles in both religious and secular papers, that the prevention and destruction of human life is one of the common sins of our age and country; and whereas many of our leading journals are in the habit of giving a prominent place to advertisements proposing to assist in committing such crimes; therefore

Resolved, 1. That this Presbytery express their decided conviction of the great criminality of such proceedings, and of all other means contributing to like fearful results.

2. That our Church members, and the families connected with us, should avoid patronizing and encouraging journals that admit these immoral advertisements to their columns.

New York Medical Gazette.—The two first numbers of this new weekly are very creditably made up, the articles being as varied and as lengthy as the size of the journal will admit. The editorial management has been confided to Leroy Milton Yale, M.D., who will doubtless be found to be the right man in the right place, and will, with his well-known energy coupled with his literary ability, do everything to make the journal attractive to the general practitioner. We cordially extend to this new candidate for favor a welcome to our exchange list, and trust that it may rapidly earn for itself an enviable position in the current medical literature of our country.

The Memory of the Late Professor Trousseau is to be revered by the Parisian Academy of Medicine, by his marble bust, which it is proposed to place in their Hall. M. Lasègue has issued an appeal for funds to the pupils and friends of the eminent deceased, for the purpose of carrying out this object.

Original Communications.

INTRA-LARYNGEAL SURGERY.

By J. SOLIS COHEN, M.D.,

OF PHILADELPHIA.

No. III.

THE EMPLOYMENT OF SOLUTIONS IN THE FORM OF NEBULA OR SPRAY.

In the topical treatment of affections of the throat and upper air-passages, applications are sometimes requisite which shall produce more prolonged contact with the diseased structures than the local applications already described; sometimes as the chief mode of treatment, sometimes as an adjuvant to other local treatment, and sometimes for the purpose of allaying the pain of disease, or the pain produced by other local applications. The method most fully accomplishing this purpose is the employment of solutions broken up into a finely diffused spray or nebula, projected upon the parts, or directed there by means of the voluntary inspiratory effort of the patient. The principles involved in the production of the nebula, it is presumed, are familiar to the readers of the MEDICAL RECORD, and need not, therefore, be submitted to explanation here. A number of instruments employed for the purpose are depicted and described at pages 169 and 170 in Vol. I. of this Journal, to which the reader is referred. The form most frequently employed, and this on account of its low price and facility of manipulation, is the Bergson apparatus with the hand bellows of Dr. Andrew Clarke, of London (Fig. 5, Vol I., p. 170). The spray from this instrument is propelled with a considerable degree of force, and it is therefore more particularly applicable to employment in affections of the nares, mouth, pharynx, epiglottis, and upper portions of the larynx; and but little effort of inspiration beyond that of ordinary breathing is necessary to produce the effect of drawing the current in upon the diseased surfaces. When the nebula is to be made to pass the glottis, the instrument of Mathieu (Fig. 1, p. 169, Vol. I.) is much more suitable, as the spray from it is more diffused, the particles being merely suspended in the air, and therefore more apt to be carried inward by the current of inspiration. These instruments must either be set in action by the patient or by an attendant, and the pumping soon becomes irksome, so that they can be employed only for a few minutes without inducing fatigue; their usefulness thus becoming impaired to a certain degree. When, therefore, a rather prolonged application is required, it will be found more convenient to employ an apparatus in which the steam from boiling water is employed as the nebulizing force, instead of compressed air as in the instruments just referred to. Siegle's apparatus, or any of its modifications, answers the purpose of preventing fatigue, because the nebu ization is produced without muscular effort on the part of the patient or his assistant, and can therefore be kept up for as long a period as may be desirable. The trifling amount of steam which becomes mingled with the spray, can hardly dilute it injuriously, and will sometimes be of great advantage by raising the temperature of the spray. With an apparatus working by compressed air, the temperature of the nebula will be cold, unless a solution in hot water be employed, or the apparatus, at the moment of its employment, be placed in a vessel containing warm water. Steam apparatuses of this kind are depicted in figures 3 and 4, page 170, of Vol. I. In most of the various modifications of Siegle's steam hydrokomion, as also in the original instrument as invented by him, the horizontal tube from which the steam emerges is bent before entering the boiler, so as to dip down into it from above; and in using these we find, every now and then, especially soon after the apparatus is set in action, that the steam condenses at this elbow in the horizontal tube, and as this is driven forward by the escape of the steam still forming behind it, it spurts out the hot water with some force, sometimes projecting it into the face or eyes of a patient with very uncomfortable results, and occasionally creating an indisposition to further continuance of the process. This can in great measure be avoided by having the horizontal tube pass directly into the boiler from the side, close to the top, and thus avoiding the curve which the steam strikes in its ascent. The ascending steam now strikes the top of the boiler, and condenses there without impeding the escape through the horizontal tube of the apparatus. This is the form of instrument that the writer is in the

habit of employing; with tubes of a duck-bill form, which permits of their being introduced within a mouth speculum, and thus avoiding considerable loss of spray. The tube passes into the boiler through a cork, which would readily be blown out by an excess of steam, thus doing away with the necessity for any special safety-valve to prevent explosion of the boiler. With this modification, the apparatus, as depicted in the above figure, is essentially the apparatus of Siegle, having his original arrangement of a lamp with a screw for raising and lowering the wick so as to regulate the evolution of the steam. A small lamp beneath the medicine glass can be used to heat the solution, when desirable to increase the temperature of the nebula. A mouth speculum is used to protect the teeth, tongue, roof of the mouth, etc.; and the tube entering the funnel extremity of the speculum, the face and clothing are thereby protected from the spray, a very desirable precaution in the administration of solutions containing nitrate of silver, or other discoloring articles. The condensed fluid, as it flows out of the funnel extremity of the speculum, can be directed into an appropriate receptacle so as to protect the clothing and furniture. The instrument, with all its appurtenances, can be obtained from Mr. GEMRIG, the prominent surgical-instrument maker of Philadelphia.

Any article of the materia medica, soluble in water, or in weak alcohol, is suitable for employment by this process. Oils, and solutions in glycerine have also been employed, but in such cases the apertures of the distributing tubes must be larger than suffice for

watery or alcoholic solutions. This method is much superior to that of gargles, because, by the minute subdivision of the particles of the fluid, and their divergence in exit, more complete contact with the structures is secured, as well as a more continuous effect. Their superiority to gargles is readily shown, for it is impossible to gargle in such a manner that the fluid shall come in contact with the posterior wall of the pharynx without a voluntary attempt at swallowing at the moment of gargling, which, at the best, but secures an imperfect and limited contact. One can prove this by gargling with some colored solution, such as of indigo or aniline, and then examining the effect before a looking-glass. He will find the roof of the mouth, tongue, and soft palate covered with the color employed, but not the deeper structures. Besides, in those diseases accompanied with acute inflammation of the fauces and pharynx, gargling is often impracticable on account of the pain produced by the effort, and sometimes on account of the difficulty of opening the mouth to a sufficient extent. With the nebulizer, however, we can direct the spray into the mouth when it cannot be widely opened, and secure contact of the solution with the affected surfaces without any other coöperation on the part of the patient, than such as simply opening his mouth to prevent the ingress of the spray.

These applications may be used in many affections of the throat and upper air-passages. In *coryza*, the spray can be readily inspired into the nostrils by simply giving the head a suitable inclination. The remedies which have been found most applicable to this disease are muriate of ammonia, to induce free secretion in dry snuffles, and alum to repress the profuse discharge of rhinorrhœa, as also, by its antiseptic qualities, to counteract fetor when present.

In *acute inflammations of the pharynx and fauces*, remedies applied in this manner are of great value. Alum and tannin are the articles most frequently employed; alum, perhaps, being indicated in the greater number of instances. The solution of alum may vary in strength, from five to twenty grains to the ounce of water, and may be employed frequently during the day. When much pain is present, some narcotic, as the extract of opium, from a quarter of a grain to a grain, may be advantageously added to the ounce of the solution of alum. Recent inflammations of the tonsils, especially in persons subject to frequent attacks of tonsilitis, can sometimes be rapidly subdued by the application of a nebulized solution of alum, five or ten grains to the ounce of water, repeated every hour or two hours until the desired effect has been produced. Sulphate of copper, in the proportion of from five to twenty grains to the ounce, has been used with similar results.

In the acute inflammation of these structures accompanying the exanthemata, as in the anginose variety of scarlet fever, we have in these applications an admirable method of affording relief to local suffering, moderating the degree of inflammation, and cleansing the parts of accumulating exudation.

In the exudations accompanying diphtheria and pseudo-membranous croup, we have a means of making local applications in cases where the employment of any other method would be impracticable. Strong solutions of tannin have been employed for this purpose in the St. Eugénie Hôpital des Enfants, with success; chlorate of potassa, bromide of potassium, and other remedies of this class, have been variously recommended; hot water broken up by nebulization, and breathed in upon the parts, is a most invaluable remedy; but the remedy now fashionable, and a good one it is, is the lime-water, which, as demonstrated by Küchenmeister, and confirmed by Biermer, Förster, and others, has a peculiarly solvent effect upon diphtheritic deposits which have been expectorated or detached from the mucous membrane; though it is by no means certain that this solvent effect can be depended upon while the deposit is *in situ*, for it has been demonstrated by Dr. Da Costa, in at least two instances, that the local application of lime water had no visible effect upon the diphtheritic deposits against which the spray was directed with great care by himself.

In these cases, it is not unlikely that the beneficial effects attributed solely to the lime, are in great measure due to the warm water with which it is combined, for the instructions are to administer the lime inhalations hot to secure the best results. In these and similar cases, the employment of warm water alone, apart from its soothing effect as a fomentation applied to the parts, as to an inflammation on the surface of the body, by supplying moisture, prevents, or at least retards, the congelation of the diphtheritic exudation, and in this manner conduces to facility of detachment and expectoration.

In *chronic inflammations of the pharynx and fauces*, the remedy which seems to have produced most general benefit is tannin, in the proportion of from one to ten grains to the ounce of water. In these cases the applications need not exceed two or three a day. Occasionally a weak solution of sulphate of zinc, a grain or two to two or more ounces of water, will produce a more satisfactory result than the tannin. In obstinate cases, especially when they have been of long standing, weak solutions of iodine, such as five or ten drops of the tincture, or twenty to thirty drops of Lugol's solution to the ounce of water, perseveringly continued, will gradually establish an alterant influence which will eventuate satisfactorily; especially will this be the case when there has been glandular involvement of the follicles, tonsils, or lymphatics.

There is a form of dry pharyngitis, *pharyngitis sicca*, which often causes a great deal of distress, producing attempts at clearing the throat which afford no relief, and sometimes accompanied with intolerable burning; in such cases advantage may be expected from the use of a nebulized solution of the muriate of ammonia, from two to ten grains to the ounce of water, and resorted to two or three times in the twenty-four hours.

I have seen a few cases of chronic inflammation of the fauces produced by exposure in the fire-rooms of engine works, in which the application of the spray of warm water, or a warmed infusion of wild cherry bark, has afforded a great deal of relief during the period of exposure.

Solutions of the nitrate of silver, from a quarter of a grain to a grain or two to the ounce of water, have been recommended, employed in this manner, in chronic pharyngitis.

Syphilitic angina has been successfully treated by the application of a solution of corrosive sublimate, one or two grains to the ounce of water.

In *acute laryngitis* the inhalation of a nebulized solution of distilled water, sometimes containing from two to ten grains of common salt to the ounce, has been found of great service. Alum, tannin, muriate of ammonia, sulphate of zinc, the mineral acids, have all been recommended in this complaint; with the addition of a little narcotic for the purpose of subduing pain. Warm water alone will often afford a grateful feeling of relief.

In *chronic laryngitis*, whether existing as a distinct affection, or connected with tuberculosis, alum, tannin, chlorate of potassa, the salts of iron, iodine, and weak solutions of nitrate of silver, have been recommended by various authorities. The writer's experience leads

him to prefer local applications by means of the sponge or mop, as more directly beneficial, and especially so in cases where ulceration has occurred; though the various astringent, alterative, and protective inhalations are often to be advantageously employed in addition.

In *œdema of the larynx* inhalations of a strong solution of tannin, frequently repeated, have been warmly recommended by Trousseau, who relates two cases in his *Clinique Médicale*. In two instances under the writer's care prompt relief followed the employment of an opiate solution, which, in the first case, had been administered for the purpose of subduing local distress preparatory to the employment of scarification.

In the recommendation of the above measures for the local treatment of affections of the throat and upper air-passages, it is not to be understood that general treatment, the regulation of diet, and so on, are not to receive as much attention in the management of disease as if the local measures were not resorted to. All that is claimed, and this much is claimed, is, that affections of these structures can be treated much more successfully by the employment of these methods of local medication, in addition to systemic treatment, than by reliance upon general medication alone.

A CASE OF
COMPLETE LATERAL LUXATION OF THE RADIUS AND ULNA OUTWARDS.

By THEODORE R. VARICK, M.D.,

JERSEY CITY, N. J.

Geo. Knight, æt. 9 years, was thrown violently from a wagon while in rapid motion, striking on his head and back, with his left arm behind him in a state of flexion. He was brought to my office on the 31st of August, 186*7*, within ten minutes after the receipt of the injury, and, consequently, in the most favorable condition for manipulation, no swelling of the soft parts having yet occurred. The forearm was in a state of semi-flexion, supported by the hand of the opposite side, the ulna lying to the outer side of the external condyle, with slight posterior projection of the olecranon. The olecranon, coronoid process, and greater sigmoid cavity could be distinctly defined, and the head of the radius in its normal attachment, could be felt rotating subcutaneously on pronating and supinating the forearm. Free motion of the forearm in every direction was present, giving the impression of being attached to the arm solely by the soft parts. The projection of the internal condyle was out of all proportion to what is seen in cases of incomplete luxation. The trochlea, coronoid depression, and the olecranon depression were distinctly recognized. Complete dislocation of the ulna outwards was diagnosed, which diagnosis was corroborated by my friend, Dr. B. A. Watson, who was present and assisted in the reduction.

The patient was placed fully under the influence of ether, and moderate extension, combined with lateral pressure, effected the reduction without difficulty. The subsequent treatment consisted of rest and cold irrigation for a few days, followed by passive motion of the parts, which resulted in perfect recovery. The amount of inflammation which followed the injury was exceedingly slight, due unquestionably to the prompt reduction of the luxation.

The exceeding rarity of accidents of this kind renders the case one of more than ordinary interest. So rare are they that Sir Astley Cooper doubted the possibility of their occurring, and writes as follows: "With respect to lateral luxations, they are always incomplete, and easily discovered." Gross's scepticism is expressed in the following words: "Lateral dislocation of the elbow-joint, besides being exceedingly rare, can scarcely occur in any other than an incomplete form, and as a consequence of severe injury extensively implicating the soft parts."—*System of Surgery*, vol. ii., p. 70.

Errichsen's testimony is, "complete lateral dislocation of the bones of the forearm being exceedingly rare."—*Science and Art of Surgery*, p. 254.

According to Chelius, "The lateral dislocation may be either complete or incomplete; that outwards is more frequent than that inwards."

"In complete lateral dislocation the projection of the fore and upper arm are much more decided than in the incomplete, and on account of the great tearing of the soft parts, the forearm is movable in every direction."—*System of Surgery*, vol. ii., p. 229.

Hamilton writes as follows: "The large majority of outward dislocations of the forearm are incomplete; indeed, only nine examples of a complete dislocation have been collected by Denucé, including two seen by himself. Malgaigne has since added two more, making in all eleven cases. All these examples have occurred in the practice of French surgeons. So far as I am able to discover, no American or English surgeon has ever reported a single example."—*Frac. and Dislocations*, 3d edition, p. 601.

Nelaton has also reported one, making in all thirteen recorded cases of the accident; which may be summed up as follows: Denucé, nine cases; Malgaigne, two; Nelaton, one; Varick, one; total, thirteen.

CASE OF DIABETES MELLITUS FOLLOWING INJURY OF THE BRAIN.

By DR. McCLINTOCK,

MORRIS, N. Y.

I was called, February 18, 1867, to see A. P., twenty years of age, from whom I obtained the following history: In February, 1866, while felling timber in the woods, he received a blow on the head from a falling branch. He was removed to the house, and two creditable physicians were called to attend him. They discovered a longitudinal fracture of the occipital and the parietal bones, crossing the left lambdoidal suture. The trephine was used, and a disc of bone with some spicula removed. One month later the bowels became constipated, and the flow of urine increased.

When first seen by me he was much emaciated; suffered intensely from thirst; appetite voracious; skin harsh and dry; tongue clean, red, and tender; pulse forty-eight; weight one hundred and eight pounds, showing a loss of twenty-two pounds since the injury was received. He was voiding two hundred and fifty fluid ounces of limpid urine daily, sp. gr. 1028, showing sugar by all the tests. He complained of no pain in the head or elsewhere.

The bone seemed nearly replaced; a slight open wound remained, from which oozed a drop of healthy pus. He had a little cough, which he referred to the throat or larynx.

He was placed for one month on a non-saccharine diet, with morphia, ipecac, and cod-liver oil.

At the end of this time the urine was decreased one-third, sp. gr. 1024, and the thirst and distressing symptoms much mitigated. Tinct. nuc. vom. (gtt. 45 daily) was soon added. At the end of the next month, sp. gr. had fallen to 1019, while the quantity was reduced to ninety-six fluid ounces. Bowels still very sluggish;

other symptoms much relieved; strength increased, but weight one hundred and five pounds. Treatment continued, with steam bath daily.

In August last, the cough increased with some expectoration, and, on examination, the lungs gave unequivocal evidence of tubercle, extensively diffused. From this time the course was downward. Emaciation increased, with harassing cough, œdema of extremities, and death occurred October 1st, eight months from the time I saw him, and nineteen from date of injury.

For comment, allow me to quote:

"Again, since continued irritation of the brain at the origin of the pneumogastric nerves will make the urine saccharine, the cause of diabetes in the human subject may reasonably be placed, in some instances, within the skull; and we may understand how diseases or injuries of the brain, or even mental disquiet or dejection operating through the brain, may produce it."—*See page* 1008, *Watson's Practice of Physic.*

"Bearing in mind the name and distribution of the pneumogastric nerve, may we not indulge the conjecture that disease or injury of the brain, near the origin of that nerve, may directly affect the function of the stomach, and thus prevent its digestive power—or the functions of the lungs, and thus interfere with the chemical destruction of sugar in those organs. This last notion might seem to receive support from the frequent association of disease of the lungs with saccharine urine."—*Op. cit. ante.*

Original Lectures.

LECTURES UPON THE PHYSICAL EXPLORATION OF THE ABDOMEN,

DELIVERED (OCT., 1867) IN THE PRELIMINARY COURSE AT THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NEW YORK,

By ALFRED L. LOOMIS, M.D.,

PROFESSOR OF INSTITUTES AND PRACTICE OF MEDICINE.

Lecture I.

Introduction.—*Topography of the Abdomen—Contents of the Various Regions—Abdominal Inspection, Palpation, Percussion, and Auscultation—Diseased Conditions of the Peritoneum, Stomach, and Intestines.*

Gentlemen—There are difficulties in the physical exploration of the abdomen which are not met with in similar examinations of the thorax.

First.—Thoracic diseases involve in their diagnosis the examination of only one of two organs, or their appendages; while an abdominal affection may require for its diagnosis the examination of ten or twelve organs. Thus, a tumor on the left side of the abdomen may be either an enlarged mesenteric gland, or it may be connected with the stomach, spleen, kidneys, ovaries, or uterus; or it may be a hernia, an abscess, a hydatid cyst, an aneurism, or, lastly, only a lump of fæces.

Second.—The action of the thoracic organs is regular and rhythmical, and their contents unvarying; while the action of the abdominal viscera is often irregular and intermittent. An abdominal organ may also at one time be greatly distended with contents, and soon after be empty; when filled, its contents may be solid, fluid, or gaseous, or all these together. The lungs and heart contain respectively the same quantities of air and blood during every five minutes of ordinary life, but the stomach and bladder can never remain long in one condition, either full or empty.

Third.—The abdominal organs are packed loosely in a cavity with loose walls. They, therefore, can be increased or decreased in size so as to alter wholly their relations to their fellow organs,—thus the uterus, usually the smallest, will, in fulfilling its natural function, become much the largest of all, until it crowds even the thoracic organs; moreover, in disease a single ovary may swell into a sac which will fill entirely the abdominal cavity. These constitute the chief difficulties in the physical examination of the abdomen, and they must always throw a certain degree of doubt upon all physical diagnosis directed to this part of the body.

To facilitate our examinations, and to render our inferences more certain, it is well to divide the abdomen into regions, by passing imaginary planes through the body. The divisions which have been proposed by different observers vary somewhat. The following, which very nearly correspond to those proposed by Dr. Bright, will, I think, be found most useful:

Thus, the abdomen may be divided into three general regions—the epigastric, the umbilical, and the hypogastric.

The *epigastric* is bounded above by the diaphragm, below by a horizontal plane passing through the anterior extremities of the tenth rib on either side. In a well-formed chest the cartilage of the tenth rib on either side offers a projection at its lower convex border, which can be felt without difficulty; a horizontal plane carried backward through these points will pass between the bodies of the first and second lumbar vertebræ. This region is subdivided into the right and left hypochondria, which correspond to the spaces inclosed by the false ribs.

The *umbilical* region is bounded above by the lower boundary of the epigastric, and below by a horizontal plane passing through the anterior superior spinous processes of the ilia; this plane, if carried backward, will pass between the second and third sacral spines.

The *hypogastric* region is bounded above by the lower boundary of the umbilical region, below in the centre by the upper margin of the pubes, on either side by Poupart's ligaments. This region occupies the whole cavity of the true pelvis. The umbilical and hypogastric regions have each three subdivisions made by two vertical planes passing backwards through the spinous processes of the pubes and the points on the tenth ribs already alluded to. The subdivisions of the umbilical region thus produced are termed the central or *umbilical*, and the lateral, or the *right* and *left lumbar*. The subdivisions of the hypogastric thus produced consist of the middle or *pubic*, and the lateral, or *right* and *left inguinal.*

The organs contained in these regions in health are as follows (the situation of these organs is very perfectly shown in the diagram on page 598, Gray's Anatomy): The *epigastric* region contains the whole of the left and a part of the right lobe of the liver, the gall bladder, the pyloric orifice of the stomach, the commencement of the duodenum, a portion of the colon, the pancreas, the aorta, and the cœliac artery.

The right hypochondria contains nearly the whole of the right lobe of the liver, the angle of the ascending colon, the greater part of the duodenum, the renal capsule, and the upper portion of the right kidney.

The left hypochondria contains the rounded cardiac portion of the stomach at all times, and a very large portion of the organ when distended, the left angle of

the colon, the spleen, and a small portion of the left kidney with its renal capsule.

The umbilical region is chiefly occupied by a portion of the arch of the colon, the omentum, and the small intestines. It contains likewise the mesentery and its glands, the aorta, and the vena cava.

The right lumbar region contains the cæcum (chiefly lodged in the iliac fossæ), the ascending colon, the lower and middle portion of the kidney, and a portion of the ureter.

The left lumbar region is occupied by the descending colon, the sigmoid flexure of the colon, the left kidney, and the ureter. The small intestines likewise occupy the lumbar region on either side.

The pubic or *hypogastric* region contains in children the urinary bladder, with portions of the ureter, also in adults if they be distended, the convolutions of the small intestines, and in the female, the uterus and its appendages.

The right inguinal region contains the "cul-de-sac" of the caput coli, the vermiform process, and the iliac vessels.

The left inguinal region a part of the sigmoid flexure of the colon, and the iliac vessels of that side.

The *methods* employed in the physical examination of the abdomen, with the exception of succussion, are similar to those practised in exploration of the thorax; but they differ in their relative importance. In thoracic examinations, auscultation is the most important method, while in abdominal examinations auscultation is only employed in determining the existence of aneurisms and of pregnancy.

Percussion and *palpation* are the means by which we gain the most useful information concerning the contents of the abdominal cavity.

Before considering the signs which indicate the changes that occur in the different affections of the abdominal organs, I will briefly notice the different methods of exploration.

Inspection.—By it we note alterations in the shape and movements of the abdomen. It is most satisfactorily performed with the patient lying on the back, with the thighs slightly flexed. In health, the abdomen is of an oval form, marked by elevations and depressions corresponding to the abdominal muscles, the umbilicus, and in some degree by the form of the subjacent viscera; it is larger relatively to the size of the chest, in children than in adults, more rotund and broader inferiorly in females than in males.

Alterations in its *shape* due to *disease*, we find to consist: First, in *enlargement*, which may be general and symmetrical, as in ascites; or partial and irregular, from tumors, hypertrophy of organs, as the liver or spleen; or from tympanitic distension of portions of the intestine by gas, as of the colon in typhoid fever. Second, it may be *retracted*, as in extreme emaciation, and in several forms of cerebral disease; especially is this noticeable in the tubercular meningitis of children.

The normal movements of the abdominal walls are connected with the respiration, so that they have a certain relation to the movements of the chest walls, being often increased when the latter are arrested, and *vice versâ*. Thus, abdominal movements are increased in pleurisy, pneumonia, pericarditis, etc., but decreased or wholly suspended when disease causes abdominal pain, as in peritonitis.

Not unfrequently, when inspecting the abdomen, a distinct pulsation will be visible in the epigastric region, which frequently is mistaken for aneurism. The superficial abdominal veins are also at times visibly enlarged, indicating an obstruction to the current of blood, either in the portal system (as in cirrhosis), or in the vena cava.

Mensuration is mainly useful in determining the exact increase or decrease of abdominal dropsies, visceral enlargements, and tumors. It is performed by means of a graduated tape.

Palpation.—This method of exploration often furnishes us with the most important information. It may be performed with the tips of the fingers, with the whole hand, or with both hands, and the pressure may be slight or forcible, continuous or alternate. In order to obtain the greatest amount of information by palpation, the patient should be placed in a horizontal position, with the head slightly raised and the thighs flexed; sometimes it is necessary to place him in a standing position or leaning forward. By *palpation* we can determine the size and position of the viscera, the existence of tumors or swellings, whether they are superficial or deep, large or small, hard or soft, smooth or nodulated, movable or fixed, solid or fluid, and whether or not they possess a motion of their own. We can also ascertain if tenderness exist in any portion of the abdominal cavity, and if pain is increased or relieved by firm pressure.

In the performance of abdominal percussion, the patient should be placed in the same position as for palpation, and the percussion should be for the most part mediate. In exploring the abdomen by means of percussion, Dr. Bennett directs that the pleximeter (the finger being the best) should first be placed immediately below the xiphoid cartilage, pressed firmly down and carried along the median line towards the pubes, striking it all the way, now forcibly, now gently. The different tones which the stomach, colon, and small intestines furnish will be distinctly heard. The percussion should then be made laterally, alternately to the one side and then to the other, until the whole surface is percussed. In this manner the different percussion sounds of the stomach, large intestines, small intestines, and the solid viscera, will be readily distinguished. Thus, the percussion sound elicited over a healthy abdomen may be *dull*, *flat*, or *tympanitic*. Over the central portion of the liver, spleen, and kidneys, the percussion sound is flat; over that portion of either of these organs where they overlap the intestines or stomach it is dull, with a tympanitic quality. Over the stomach and intestines it is tympanitic, more so over the former than the latter. When fluid occupies the abdominal cavity, over the fluid the percussion sound will be flat. A distended bladder or uterus, an enlarged liver, spleen, kidney, or mesenteric gland, ovarian, aneurismal, and other tumors, are recognized and their limits determined by the unnatural and increased area of the percussion flatness; while on the other hand, gaseous distension of the stomach or intestines is recognized by the increased area of tympanitic percussion.

In the physical exploration of the abdomen, auscultation is only of service, as I have already said, in the diagnosis of aneurisms, and in detecting the pulsations of the fœtal heart, and the utero-placental murmur in the pregnant state. Our examinations of the abdominal viscera are sometimes interfered with and rendered uncertain, by changes that occur in the abdominal walls. Generally the abdominal walls are sufficiently thin, soft, and movable for us to determine with considerable accuracy the situation and condition of the subjacent organs; if, however, everything is masked by layer upon layer of fat, as in some cases of obesity, all abdominal examinations will be unsatisfactory. An œdematous condition of the abdominal walls, as in "Bright's disease," may also prevent us from ascertaining the condition of the viscera. When this occurs, the surface of the abdomen presents a smooth, even, shining, waxy appearance, and pits on firm pressure. *Superficial abscess* of the abdominal walls also occurs occasion-

ally, which interferes greatly with the exploration of the abdominal cavity. You can recognize these by the circumscribed bulging, by tenderness on slight pressure, by the redness of the surface, and by the characteristic fluctuation of a superficial abscess. The abdominal muscles also are sometimes abnormally developed, or unnaturally rigid, as in tetanus, rheumatic inflammation, and in the early stage of peritonitis; this somewhat interferes with our examinations.

DISEASED CONDITION OF THE PERITONEUM.

Under this head may be included the various results of inflammatory action, ascites, etc. They all give rise to more or less abdominal enlargement.

By *inspection* we recognize in *acute peritonitis* either a diminution or an entire suspension of abdominal respiration, the breathing becoming entirely thoracic. The abdomen enlarges, becomes unnaturally tympanitic, and there is marked tenderness on firm pressure. The comparative result of *firm* and *slight* pressure is one of the strong diagnostic marks of peritoneal inflammation.

Chronic peritonitis is almost always connected with tubercular deposits in the substance and on the free surface of the peritoneum, and in addition to the tympanitic distension of the abdomen, and the tenderness on firm pressure noticed in acute peritonitis, fluid accumulations take place in the peritoneal cavity.

Ascites is a collection of fluid from any cause in the peritoneal cavity.

On *inspection* we always find the abdomen *uniformly* enlarged, and its movements during respiration are either suspended, or limited to the epigastric region. The superficial abdominal veins, if the ascites depends upon disease of the liver, will often be found enlarged.

If the palmar surface of the hand be applied to the side of the abdomen at the level of the fluid, and light percussion be performed on the opposite side, a sense of fluctuation will be communicated to the hand.

Percussion gives flatness at the lower and most depending portion of the abdomen, while at the upper portion above the level of the fluid, there is a drum-like tympanitic resonance. When the patient is in the erect position, the tympanitic resonance is confined to the epigastrium and upper portion of the umbilical region. If in a recumbent position, the tympanitic resonance will extend into the hypogastrium; if placed on either side, the lumbar region of the opposite side becomes tympanitic. Other abnormal changes that occur in the peritoneum are connected with deposits that may be classed under the head of abdominal tumors.

In considering the physical signs which indicate *abnormal changes in the different abdominal organs*, I will commence with those of the stomach. When this viscus is empty, or not distended with gas or food, there is on *inspection* no visible prominence to indicate its position, nor does *palpation* furnish us any information as to its condition.

Percussion gives a metallic or tympanitic resonance, which enables us to distinguish it from the surrounding viscera. The line of dulness which markes the lower border of the liver, and the inner border of the spleen, determines the upper and lateral boundaries of the stomach; to ascertain the lower border, percuss gently downward from this line of dulness until a slight change in the percussion sound indicates that we have reached the transverse colon. The cardiac orifice or extremity of the organ is situated opposite the inner border of the seventh rib. At a point a little below the lower border of the liver, within a line drawn from the right nipple to the umbilicus, the pyloric orifice of the organ is situated. The lower margin of the great "cul-de-sac" is found generally near the umbilicus.

Diminution in the size of the stomach cannot be recognized by physical exploration. An increase in size or distension of the stomach may occur from an accumulation of gas, from large quantities of fluids or solids taken into the stomach, or it may be enlarged within circumscribed spaces from cancerous deposits in its walls.

Gaseous or *tympanitic* distension of the stomach is recognized by an increase in the area of the characteristic tympanitic resonance of the organ. A *distended* condition of the stomach from food or drink is recognized by an absence of the normal resonance, and by a continuation of the dull percussion of the liver and spleen downwards to the umbilicus. A moderate amount of fluid or solid in the stomach can be determined by a limited area of dulness corresponding to the normal situation of the "cul-de-sac" of the organ.

Cancer of the stomach most frequently has its seat at the pyloric extremity of the organ, but in whatever portion of the organ it may be developed it can be recognized by circumscribed dulness on percussion, where in health (when the stomach is empty) we should have tympanitic resonance. The percussion dulness elicited over the cancerous mass, however, has a hollow character which is readily distinguished from the flat percussion sound of a solid organ.

By palpation, a nodulated mass is readily detected corresponding to the area of percussion dulness, which is movable, easily grasped, and readily separated from the surrounding viscera. These signs, taken in connection with the attendant symptoms, are almost always sufficient for a positive diagnosis.

Intestines.—In a normal condition the large intestines furnish a more amphoric percussion sound than the stomach. When, however, they are filled with fluid or solid accumulations, the situation of these accumulations can be marked out on the surface by the dulness on percussion. As these most frequently collect in the descending colon, the percussion sound over this portion is usually less resonant than over the ascending or transverse colon. According to Dr. Bennett, in a practical point of view it is often useful to determine whether a purgation by the mouth or an enema is likely to open the bowels most rapidly. If there is dulness in the left iliac fossa, in the track of the descending colon, that portion of the intestine must be full of fæces, and an enema is indicated. If, on the other hand, the sound in the left iliac fossa is tympanitic, and the right dull, an enema is of little service, as it will not extend to the cæcum, and purgatives by the mouth are indicated. Sometimes the whole colon, or the transverse portion, or, what is more common, the sigmoid flexure of the large intestine, becomes distended with fæcal accumulations, giving rise to circumscribed abdominal enlargement, and to flatness on percussion over that portion of the abdomen which corresponds to the situation of the intestine. (Care must be taken not to confound this condition with an enlarged liver, spleen, tumor, etc.) The percussion sound over the small intestines, unless they are distended with gas, is higher pitched and less amphoric than that of the surrounding large intestines.

A CHOLERA MEDAL.—A decree of the King of Italy orders that a medal shall be struck in bronze, silver, and gold, to be conferred on such persons as shall have rendered signal service during the prevalence of cholera or any other grave epidemic. It will have on one side the head of the king, and on the other a crown of oak, with a legend importing that it is a recompense for services in connection with the public health.

Progress of Medical Science.

Iodine as an Injection.—Removal of the Stains produced thereby.—One of the great objections to the use of iodine as an injection being its disposition to stain the linen, Dr. Percy Boulton, of Harewood square (London), calls the attention of the profession to the fact that all such stains can be prevented by the addition of carbolic acid, which not only renders the iodine colorless, but at the same time acts as an antiseptic. He recommends the following compound: Of compound tincture of iodine, one drachm; solution of carbolic acid, six drops (as sold in the shops); water, six ounces. I have found this particularly useful, applied by means of the spray-producer to the mucous membrane of the nose in chronic ozæna, when it would have been impossible to use tincture of iodine alone in solution, owing to the staining of the face, and also of the pocket-handkerchief when used subsequently. The offensive odor in this case was at once removed, and a sense of cleanliness imparted which had not been experienced by the patient for a long time before.

Over-Eating as a Risk to Life in Operations.—Over-eating is not commonly supposed to lead to any such risks of life as over-drinking does; yet I believe that you will find in operative surgery, that among the habits that increase the risks of life, this may stand not far from drunkenness, especially if the over-eating is of meat and other nitrogenous foods. I am led to believe this from several cases that I have observed, and I think that there are large evidences of it. You know that the general results of operations in provincial hospitals tell of a smaller mortality than in the hospitals of London and the largest towns. The difference is commonly ascribed to differences in the purity of the air, and other advantages of that kind, in the comparatively rural districts. I believe that much more of it is due to the differences of habits in the several classes of patients. The differences are many; but one of the chief of them is that the poor in the agricultural districts eat far less meat than those in large towns do, and are by comparison less fed, though probably not worse fed, and you may frequently observe that patients who come to us from agricultural districts bear operations in all respects better than Londoners who are submitted to the same proceedings. Of course many things concur to make the differences of constitution between a town and a country population; but I am satisfied that among these things a very potent influence is exercised by the difference of diet; and the differences that we may thus see are strongly illustrated by what one hears of the results of operations upon the natives of India and other Eastern countries, whose diet is almost exclusively vegetable. Almost any amount of injury may be inflicted on them, and not be followed by the destructive mischiefs which occur in Europeans under the same circumstances. They are defective, it is said, in healing power; but they recover with comparative certainty, however slowly, from operations of the greatest magnitude. A common expression about them is, "You can't kill them."—James Paget, F.R.S., *London Lancet.*

A New Glycerine.—To obtain this compound M. Edmone Sichel employs four parts (by weight) of yelk of egg, and five parts of glycerine, which he mixes simply in a mortar. It has the consistence of liquid honey, and is unctuous like the fatty substances, over which it has the advantage of being easily removed by water. It is unalterable, a specimen having been left exposed to the air for three years with impunity. Applied to the skin, it forms on the surface a varnish which protects it from contact with the air. These properties render it serviceable for broken surfaces of all kinds, particularly for lumps, erysipelas, and cutaneous affections, in which it soothes the itching, and also for sore nipples: its harmlessness preventing, in the latter case, any interruption of suckling.—*Am. Jour. Pharm.*

To Prevent Pitting in Small-Pox.—Dr. C. Black (*Lancet*) claims that the complete exclusion of light from the room in which small-pox patients are confined, together with the application of hog's lard to the face to guard it from contact with the oxygen of the air, will effectually prevent pitting.

The Cause of the Activity of Animal Poisons.—Prof. *George B. Halford*, of the University of Melbourne, has discovered that in the case of the victim of the bite of the cobra di capella, molecules or living "germinal" matter are thrown into the blood and speedily grow into cells. These cells multiply so rapidly that in a few hours millions upon millions are produced at the expense of the oxygen absorbed into the blood during respiration; and hence the gradual decrease and ultimate extinction of combustion and chemical change in every other part of the body, followed by coldness, sleepiness, insensibility, slow breathing, and death. The cells which thus render in so short a time the blood unfit to support life, are circular in diameter, on the average of one seventeen-hundredth of an inch. They contain a nearly-round nucleus of one two-thousand-eight-hundredth of an inch in breadth, which, when further magnified, is seen to contain other still more minute spherules of living "germinal" matter. In addition to this, the application of magenta reveals a minute colored spot at some part of the circumference of the cell. This, besides its size, serves to distinguish it from the white pus or lymph-corpuscle. The professor adds to his account of the action of this powerful poison that he has many reasons for believing that the *materies morbi* of cholera is a nearly allied animal poison.

Nitrite of Amyl in Angina Pectoris.—Dr. T. Lander Brunton (*Lancet*) gives some very interesting results of the treatment of that distressing complaint, angina pectoris, by this new compound. He was first impressed with its value as a therapeutic agent after witnessing some experiments with it by Dr. Arthur Gamgee, of Edinburgh. The effect of its administration seemed to be the lessening of the arterial tension and the induction of capillary congestion; this, together with the assertion of Dr. B. W. Richardson, that while under its influence there was a paralysis of the nerves from the periphery inwards, as well as the fact propounded by Guthrie (Jour. of Chem. Soc., 1859) that it was of utility as a resuscitative agent in drowning, suffocation, and prolonged fainting, led him to use it in a case of obstinate anginal pain, which lasted in paroxysms for an hour to an hour and a half, and recurred every night.

In reference to its action in this and other cases he says:—

"On pouring from five to ten drops of the nitrite on a cloth and giving it to the patient to inhale, the physiological action took place in from thirty to sixty seconds; and simultaneously with the flushing of the face the pain completely disappeared, and generally did not return till its wonted time next night. Occasionally it began to return about five minutes after its first disappearance; but on giving a few drops more it again disappeared, and did not return. On a few occasions I have found that while the pain disappeared from every

other part of the chest, it remained persistent at a spot about two inches to the inside of the right nipple, and the action of the remedy had to be kept up for several minutes before this completely subsided. In almost all the other cases in which I have given it, as well as in those in which it has been tried by my friends, the pain has at once completely disappeared. In cases of aneurism, where the pain was constant, inhalation of the nitrite gave no relief, but where it was spasmodic or subject to occasional exacerbations it either completely removed or greatly relieved it. It may be as well to note that in those cases in which it failed, small bleedings were likewise useless.

"From observations during the attack, and from an examination of numerous sphygmographic tracings taken while the patients were free from pain, while it was coming on, at its height, passing off under the influence of amyl, and again completely gone, I find that when the attack comes on gradually the pulse becomes smaller, and the arterial tension greater as the pain increases in severity. During the attack the breathing is quick, the pulse small and rapid, and the arterial tension high, owing, I believe, to contraction of the systemic capillaries. As the nitrite is inhaled the pulse becomes slower and fuller, the tension diminished, and the breathing less hurried. On those occasions when the pain returned after an interval of a few minutes, the pulse, though showing little tension, remained small in volume, and not till the volume as well as tension of the pulse became normal, did I feel sure that the pain would not return.

"As patients who suffer from angina are apt to become plethoric, and greater relaxation of the vessels is then required before the tension is sufficiently lowered, I think it is advisable to take away a few ounces of blood every few weeks. When the remedy is used for a long time, the dose requires to be increased before the effect is produced. A less quantity is sufficient when it is used with a cone of blotting-paper, as recommended by Dr. Richardson, than when it is poured on a large cloth. From its power of paralysing both nerves and muscles, Dr. Richardson thinks it may prove useful in tetanus; and I believe that, by relaxing the spasm of the bronchial tubes, it might be very beneficial in spasmodic asthma. I have tried it in a case of epilepsy, but the duration of the fit seemed little affected by it. It produces relief in some kinds of headache, and in one of neuralgia of the scalp it relieved the severe shooting pain, though an aching feeling still remained."

Singular Case of Abscess in the Situation of Femoral Hernia, Containing Air. By F. D. Lente, M.D., of Cold Spring, N. Y.—Miss G—, aged 54, usually enjoying good health, was attacked suddenly, March 22, 1867, while coughing moderately, with severe pain or "cramp" in the hypogastrium, which continued to occur in paroxysms, notwithstanding hot fomentations, etc. Patient had had similar attacks, at long intervals, for several years, always produced by coughing, and she could arrest the action of the diaphragm to avoid acting painfully on the abdominal viscera. The pain seemed to her to be connected with the bladder, and to induce a disposition to pass water frequently. There was also some bearing-down pain, and anodynes were prescribed *per rectum*. The anodynes occasioned some nausea, which had not existed before, and the bowels had been regular. The next day the pulse was 100. She had less strangury pain, but complained of pain across the abdomen, at the level of the umbilicus, and extending to the spine, of a boring character; also of a pain along the lower part of the back, especially in attempting to assume a sitting posture. No distension of abdomen, and no pain on pressure. On thorough examination, a tumor was observed in the right groin, below Poupart's ligament. Patient says it appeared suddenly some years ago, and has never given "the least uneasiness;" is oval in shape, its long diameter parallel with Poupart's ligament, somewhat larger than a pigeon's egg, movable, and not painful on firm pressure. There was no appearance of the neck of a hernia above the ligament, and no pain on pressure in that locality. Simple enemas were ordered, and anodynes. March 31st.—The enema acted well. The tumor was sore after the manipulation, but patient up and about the room. In the evening had a recurrence of pain. April 3d.—Pain still confined to the region of umbilicus mainly, extending to the spine, aggravated by sitting up. Has also some bearing down and tenesmus. Bowels move regularly and without pain, and no nausea. Tumor much inflamed, and the induration extending to surrounding areolar tissue, but not *above* Poupart's ligament. No pain on pressure over any part of the abdomen. Pulse good; ordered cataplasms and anodynes. April 10th.—Still obliged to use anodyne enemata. No nausea, and bowels move daily. Inflammation of tumor increased, and extends several inches around the femoral ring. For some days it has been softening, and fluctuation distinct. Has a peculiar feel, different from an ordinary abscess in a "ripe" condition. Determined to lay open the abscess, and having an idea of possible connection with hernia, first punctured with an exploring knife, the withdrawal of which was followed by a slight puff of gas of an odor unmistakably *fœcal*. A probe being introduced, another puff followed. On entering the abscess with the scalpel, a gush of fetid gas was followed by several ounces of dark, unhealthy pus, but no feculent matter. The finger, introduced into the cavity, could be passed in various directions, but did not enter the abdominal cavity. May 23d.—Great relief followed the evacuation of the contents of the abscess, though the pains continued for several days; is now quite well, and moves about the house. The wound is not quite healed. Was this a suppurating gland or a hernia? If the latter, it might possibly be an instance of protrusion through the thyroid foramen, and if a hernia, it must have been of the cæcum, since there was never any constipation. If it was a hernia, would there not have been disturbance of the functions of the abdomen, and other symptoms than the boring pain across the abdomen? There was no appearance of gangrene about the abscess.—*N. Y. Medical Journal.*

A Convenient Hæmostatic. By A. P. Merrill M.D.—A combination of elixir of vitriol and tannic acid has been recommended for this purpose, but I was not aware of its value until, in 1857, I accompanied a patient to the office of the late Dr. Horace Green, to obtain the benefit of his skill as a specialist in diseases of the throat. The tonsils, although not enlarged, the doctor thought in a morbid condition, and he pared a thin slice from the surface of each. Only a little bleeding followed during the day, but at two o'clock that night his wife discovered that his pillow was bloody, and called me from my bed in the same hotel. I found his pulse feeble, breathing labored, and strength greatly prostrated; and he soon vomited a large quantity of blood which had been swallowed. I could see the pulsations of a bleeding artery in one of the tonsils, and there was an oozing of blood from the cut surfaces. Having no other remedy at hand, I made a mixture of elixir of vitriol and tannic acid, and applying freely, the hæmorrhage was immediately and permanently arrested.

Since that time I have used this mixture in various internal and external hæmorrhages, and with uniform success. I am now inclined to the opinion, that whatever can be effected in such cases, and even in diarrhœa, by astringents, may be done by this remedy; and in emergencies it is more likely to be found within convenient reach than most other remedies of this class. A touch of the tongue with this combination, made in the strength of a saturated solution, will convince any one of its powerful astringency.

KOBERLE ON THE AMPUTATION OF THE UTERUS.—The *Gaz. des Hôpitaux*, No. 70, 1866, reports according to the *American Medical Times*, January, 1866 (?) and *Gaz. Hebdom.*, No. 11, 1866, that operative surgery now undertakes procedures which were formerly held to be impracticable. This is true of ovariotomy and the extirpation of the uterus by the abdominal walls. The latter operation is said to have been first performed by Clay, an American, in 1847, and that then it was performed by several foreign surgeons, and in France by Koberle. The last operation was by Storer, of Boston, in September, 1865. (Dr. Storer's case is familiar to our readers; he having removed the entire uterus, on account of an enormous fibrous tumor weighing thirty-seven pounds.) Up to this time there have been twenty-four extirpations of the uterus and both ovaries; of the former seventeen two recovered; of the latter seven four recovered.

Koberle remarked that the above account was incorrect. The first extirpation of the uterus was performed by Heath in Manchester, England, and the first one with a successful result by Burnham of Lowell, Massachusetts, in 1853. The known number of operations, with or without removal of both ovaries, is forty-two, with eight cures and thirty-four deaths, that is, one cure in every five cases.

The extirpation of the uterus is a much more grave and difficult operation than that of the ovaries. The most of the operations have been performed on account of errors in diagnosis. More than a third of the cases bled to exhaustion during the operation or soon after. Burnham had performed the operation most frequently; nine times, and twice with success. Koberle had had two favorable results in five cases. The deaths were from hæmorrhage. In the first case a vein which was not ligated caused a fatal oozing, much blood having already been lost during the operation. In the second case a ligature slipped off during the operation, and a fearful hæmorrhage quickly destroyed life. In the third case the operation was very difficult, on account of adhesions over the entire surface, and complication with ascites. In this case Nelaton had previously diagnosticated an ovarian cyst, and had made injections of iodine to the right and left of the tumor, in the abdominal cavity (Bauchbohle), and had thus caused the general adhesions. The ovaries were found healthy and not removed.

The operation lasted nearly three hours, and was accompanied by severe hæmorrhage. The first successful result occurred in 1863. The two ovaries, the uterus, and a fibroid weighing seven kilogrammes (more than fifteen pounds) were removed. This patient is still alive and well. The second was reported in the *Gaz. Med., Strassbourg*, 1866, No. 5, at the same time with a favorable result in a case of polypus with an irreducible inversion of the uterus. The operation took place March 6, 1866. The inversion was twenty-six centimetres long (about eight and two-third inches). The puncture of the tumor, which was considered an ovarian growth, had no result. Then Koberle recognized it as the fibrous tumor, which was developed from the right superior wall of the uterus. The broad uterine ligament on the right side was twice ligated and then divided between the ligatures. An iron wire loop was then firmly secured around the upper part (in der Hohe) of the neck of the womb, the left ovary and tube (Fallopian) seized with it, and the tumor cut off some centimetres above the wire. It weighed five kilogrammes (more than ten pounds). The ovaries were healthy. The wound united without any peculiar applications, the lower angle being left open. The ligature of the uterus fell off with the dead stump in ten days.

The patient recovered without any accident, except that some months after an abscess opened in the rectum. Since then she has been perfectly well.

Besides the abdominal incision for the purpose of extirpation of the uterus in fibroid tumors, gastrotomy has been performed twenty times, in order to ligate or enucleate pediculated fibroid tumors, and eight times with success. In fourteen other cases the operation was not completed, and of these, there were five fatal results.—*E. Koberle, Documents pour servir à l'histoire de l'extirpation des tumeurs fibreuses de la matrice par la méthode sus pertrenne. Paris*, 1865. *Monatsschrift fur Geburtskunde, Band* 27, 5 *Heft, from Gaz. des Hôpitaux, No.* 72, 1866.

ON THE SUBCUTANEOUS INJECTION OF QUININE IN CASES OF MALARIAL NEURALGIA, by E. C. SEGUIN, M.D., Resident Physician New York Hospital.—Several cases are related from the hospital case-book, illustrating "the effect of quinine injected hypodermically over the seat of neuralgias due to blood-poisoning by malaria." All such cases had previously been treated by quinine and iron internally, with blisters over the affected part. This treatment was not satisfactory; the usual term of hospital residence being from three weeks to three months. Dr. W. H. Draper directed, in the first case related, the injection of quinine. "In four days the pain was relieved, and in four more the cure was complete and permanent; the case having previously been under treatment five weeks without benefit." The following is the formula used: Quin. sulph., grs. lx.; acid. sulph.dil. gtt. xl.; aquæ dist. ℥ j.; mix, and make a solution, filtering with care. xxxv. minims are equal to four grains of quinine. "The injections were given in the following manner: A fold of skin being taken up, and firmly held between the thumb and finger, the point of the syringe was introduced at the top of the fold, where a partial anæsthesia had been produced by the pressure; the needle being put in its full length, the solution was forced in gradually, as the needle was withdrawn, so as to throw the liquid as much as possible into the track of the wound, and to cause the least rupture of the surrounding connective tissue. After removing the syringe, a little circular friction was used to assist absorption. The immediate effect of the injection is a pretty severe burning pain felt in the part, due, probably, to the acid and irritating property of the solution. The therapeutic effect of the medication shows itself in the arrest of the pain and hyperæsthesia, followed, in some instances, by slight, though distinct local anæsthesia. No abscesses or other unpleasant symptoms have followed the seventy-eight injections used in the cases mentioned." The *modus operandi* may be said to be three-fold. 1st. By absorption of the drug, whereby it obtains its specific effect tending to the removal of the cause of the neuralgia. 2d. By direct therapeutic action of the quinia upon the nerves and cellular elements of the parts affected. 3d. By pressure; a purely mechanical effect of considerable importance, due to the large quantity of fluid used, and to the amount of exudation thrown out. Of the six cases related, the subjects were all seamen from Southern

ports, and all had the malarial cachexia, having had remittent or intermittent fever before the coming on of the pain. In none of the cases was the pain intermittent, nor was it of the same intensity during the twenty-four hours, being usually more distinct in the afternoon. The internal administration of iron and cinchona was used in connection with and for some time after the injections were discontinued.

Raw Flesh and Brandy in the Treatment of Phthisis.—1. The exhibition of raw beef and mutton, and of alcohol, in doses varying according to circumstances, arrests the progress of pulmonary phthisis and other consumptive diseases. Under the influence of this mode of treatment, strength is restored, the countenance recovers its animation, appetite returns, and the patient gains in flesh and weight. In a month, or even in three weeks, in several cases, the body gained four, six, eight, and even as much as twelve pounds. 2. This general improvement of the system, aided by appropriate treatment of the leading symptoms, checks the hectic fever, diarrhœa, and night-sweats. 3. When these complications have yielded, amendment of the local condition of the lungs, or other diseased organs, sets in, and the advance of cicatrization can be ascertained by percussion and auscultation. 4. The efficacy of the treatment is not equal in all stages of the disease. In the third stage, the improvement in general is confined to a prolongation of life, the inevitable issue being merely postponed. In the second stage only can the treatment be said to be curative, provided all the necessary precautions are strictly attended to. Of all atrophic diseases in which the treatment is applicable, that in which the greatest measure of benefit is obtainable is pulmonary tuberculosis, in all its stages. It is also highly beneficial in every form of anæmia, whether resulting from hæmorrhage or spermatorrhœa; at the conclusion of acute affections, especially typhus and typhoid fevers, in the last stage of leucæmia, albuminuria, and diabetes; it is also frequently successful in pyæmia, paludal cachexia, chronic nervous fever, and in general in all protracted morbid conditions in which repair is obviously unequal to the expenditure of the system.—*Jour. of Pract. Med. & Surg.*

Poisoning by Strychnine; Recovery after taking Three Grains.—Mr. W. H. Folker reports in a recent number of the *Lancet*, a case of the above. The patient took three grains of the alkaloid for suicidal purposes. The first spasm came on in three-quarters of an hour. The severest paroxysm occurred in an hour and fifty minutes. The spasms ceased in twelve hours. The face was calm, and free from the risus sardonicus of ordinary tetanus. The intellect was clear throughout, although screaming was present, together with a dread of being touched—similar to that witnessed in hydrophobia. Touching, and the effort of swallowing, directly produced a spasm. The spasms were very irregular in their occurrence. Chloroform was apparently the remedy which brought about the good result. In this respect the case bears a striking analogy to the one reported in our columns (March 1, 1867) by Dr. Hamilton, of Chardon.

Blotting Paper as a Dressing.—Dr. Roser (*Schmidt's Jahrbücher*) recommends blotting-paper as a very cheap and serviceable surgical dressing. It is to be applied either in broad pieces or in separate layers so placed in reference to each other that the edge of each leaf is directed toward the pus to be absorbed.

Starch Injections in Urethritis.—M. Luc (*Recueil des Mémoires de Med. et de Chirurg. Militaires*) uses with great success a tolerably thick solution of starch in cases of acute urethritis. He says: "It never produces pain, and avoids strictures."

Examination of the External Auditory Passage.—In the interesting article from my friend Dr. Shaw, on this subject, in your journal for May 30th, occurs the following sentence: "From the great uncertainty which attends the weather, recourse must be had to artificial light, which will be found an efficient substitute" (that is for ordinary daylight or sunlight). One of the great advantages which the method of illumination of Von Tröltsch, of which Dr. Shaw justly speaks so highly, is, as it seems to me, the fact that we are *never obliged* to substitute lamp or gaslight for ordinary daylight, even if the weather be cloudy or stormy. I have never as yet seen the daylight which was not sufficient to fully illuminate the auditory canal and membrana tympani, when reflected by the concave mirror. Believing, as I do, that the introduction of this simple means of examination has done more for the advance of our knowledge in ear disease than any one suggestion ever made in this province, I am induced to ask you to insert this as an addendum to an article which has done a real service to the profession. If I am correct in my views of the adaptability of the mirror to any weather, cloudy or pleasant, its use becomes still more simple.—*D. B. St. John Roosa, Bost. Med. & Surg. Jour.*

Case of Papillary Growth in the Armpit; Cure by the Electrolytic Method.—A lady presented herself, Nov. 21, 1866, on account of a small papillary and highly vascular growth, which had first appeared in the right axilla, since the commencement of 1865, and had somewhat rapidly increased in size during the last few months. It was one-third of an inch long, and one-fourth of an inch wide in its widest part. I introduced a needle connected with fifteen cells of the battery into the base of the tumor, and allowed the current to pass for three minutes. No chloroform or ether spray was used. The current had not acted many seconds, when a peculiar change was observed in the tumor, which lost its flesh color, and appeared quite white, as if it had been frozen. When the needle was withdrawn, circulation in the tumor had evidently quite ceased. There was scarcely any pain during the operation, and none at all afterwards, nor was any blood lost. Nov. 23.—Tumor entirely shrivelled up, looking like a thin brown leaf just adhering to the skin. The operation, therefore, was not repeated. Dec.—The eschar fell off about a week after the operation. There is now no sign that there ever was a tumor, no scar, nor even redness of the skin perceptible.—*Dr. Julius Althaus in the Brit. Med. Journ.*

Death from Chloroform on its Third Administration.—Assistant-Surgeon H. A. Du Bois, U.S.A., in the *N. Y. Med. Journal*, communicates a report of a case of death by chloroform in a patient about thirty-five years old, suffering from scrofulous disease of the testicle. The testicle on the first examination was found considerably enlarged; an incision gave exit to a quantity of pus, and after treatment for some time, a fungous growth was removed, together with a greater part of the testicle, by Syme's operation. The wound soon healed, and the patient was discharged cured. It required two ounces of chloroform to bring him under its full influence. He struggled violently, and had a number of tonic spasms. In three months he again presented himself, the other testicle having taken on the disease, and after treatment for some time, it was removed. About a half ounce of chloroform was used on this occasion, the patient coming under its influence with little difficulty. The wound

healed to a great extent, though at the end of two or three weeks one of the ligatures still remained firmly held. So much pain was induced by the attempt to remove it, that chloroform was again resorted to. About a drachm was put on a small towel, loosely folded in the form of a cone, and with the apex well opened, I proceeded to put him under its influence. He stated that he was coming under its influence easily, and that he hoped he would not cause as much trouble as before. He breathed well, and appeared to be rapidly becoming affected. The second stage coming on, he threw his arms about, so that it required an assistant to hold him, though not to the extent that one frequently sees; the breathing suddenly becoming stertorous, the chloroform, which had been renewed to the extent of one fluid-drachm, was discontinued. The patient lay on the bed, and I watched attentively the moment when the eyelids would show, by their relaxed condition, that the patient was sufficiently under the influence of the anæsthetic to perform the trifling operation required. The stertor was followed by a spasm, causing the body to assume the condition of opisthotonos, and to slide down in the bed, the face assuming a peculiar expression, which alarmed and caused me to throw water on the face and abdomen. The limbs now became relaxed, the spasm having ceased, and having lasted about half a minute. The breathing was gasping, and he inspired at long intervals. I seized the tongue, and drew it out of the mouth, and commenced artificial respiration; sent for ammonia, hot water, and a magneto-electric machine, while I examined the heart, which was beating but feebly. Ammonia was applied to the nostrils, cold water to the chest and face, and hot to the abdomen. In the hope of restoring the breathing, artificial respiration was kept up, and a strong current of electricity was passed through the heart, through the throat, and through the length of the spinal cord. After a few gasping respirations, death took place. The means of resuscitation were kept up for some time after life had ceased, but without any effect. Death took place in from five to seven minutes after the commencement of the administration of the chloroform. The chloroform used was that prepared by Squibb. The quality of the chloroform was tested, but no impurity was detected. An autopsy, four hours after death, revealed a slight accumulation of fat over the pericardium and on the surface of the heart, an effusion of serum in the pericardium, heart structure firm, a few hardened tubercles at the apices of the lungs. At the apex of the left a well-marked cicatrix, the kidneys congested, measuring seven inches in length by four in width, spleen greatly enlarged, and the liver of normal consistence, and slightly increased in size. The spermatic cord was diseased for about two inches, and the ligature was nearly ulcerated through. Considerable fluid was effused between the dura and pia mater, and arachnoid. The cause of death could probably be explained by the condition of the kidneys. Patient had lost flesh from the commencement of the disease, had frequently complained of pain in the region of the kidneys, and at the time of the second admission was suffering from break-bone fever. Perhaps the chloroform acting upon the blood, already overcharged with excrementitious matter, may have produced the convulsion and caused the effusion, which may have been the cause of the cessation of the heart's action; though it is possible that the overloaded blood, when charged with chloroform, acted so as to cause paralysis of the heart.

THE UMBILICAL SOUFFLE; Dr. A. Charrier, Paris (*Gazette des Hôpitaux*).—The phenomenon named umbilical souffle, though rare, occurs more frequently than is generally supposed. It is in practice a premonitory symptom of very great importance. It indicates compression of the umbilical cord, and consequently, an impeded utero-fœtal circulation. The umbilical souffle may be intermittent or persistent. Intermittence diminishes the seriousness of the prognosis. Permanence of the souffle increases the gravity of the prognosis, particularly if alternate, and acceleration of the cardiac beats comes on, and afterwards violent movements of the fœtus, followed by a diminution both in the rhythm and in the number of the fœtal pulsations. When such symptoms occur, it is evident that the death of the fœtus is imminent. When the souffle is intermittent, it is the duty of the practitioner to abstain from action and wait; but he should watch attentively, by auscultation, the utero-fœtal circulation. If the souffle be persistent, and the phenomena of slow action, and acceleration of the cardiac pulsations of the fœtus, etc., are presented, the practitioner should step in and induce premature labor. The umbilical souffle is frequently produced by an accidental shortening of the cord. The accidental shortening of the funis is in direct relation to its length; for the longer the umbilical cord, the greater is its chance of becoming twisted round one or more parts of the fœtus, and so giving rise to disorders just mentioned. Accidental or natural shortening of the cord may be dangerous in the last stage of labor by this sign: an inversion of the fundus of the womb at the time of each pain, which inversion is reduced spontaneously after the cessation of the uterine contraction. The anatomical proof of this complete inversion of the uterus may be found in the premature separation of the placenta at its central part, in the presence of recent clots behind this organ, and in the rapid expulsion of the after-birth into the vagina almost immediately after the passage of the child.—*Half-Yearly Abstract.*

MILK AS A CARDIAC SEDATIVE.—Dr. Pecholier avers that under the influence of a milk diet, which he enjoins in the obstructive diseases of the heart, the impulse of the heart diminishes, together with the palpitation, and the congested condition of the face, the brain, and the lungs. The patient experiences unexpected improvement, and he thinks that by the adoption of this plan life may be prolonged.

FORECASTS OF WEATHER.—There are strong grounds for believing that the barometer may yet be made available in giving premonitions of storms. G. W. Hough, Director of the Dudley Observatory at Albany, stated, at the last meeting of the American Association for the Advancement of Science, that the observations made during the past year with his self-recording barometer confirmed the opinion advanced by him at a previous meeting that the barometric column is restless during a storm which may not be within several hundred miles of the instrument. The number of minute oscillations of the column, taken in connection with the movement apparent to the eye, will indicate the comparative severity of the storm. It is probable that one hundred similar instruments, properly distributed across our continent, would record the atmospheric changes with such minuteness that new and important generalizations might be arrived at.

A SIMPLE METHOD OF PROTECTING WATER FROM THE ACTION OF LEAD PIPE.—*Dingler's Polytechnisches Journal* publishes a simple method, brought forward by Dr. Schwarz, of Breslau, for preventing the poisonous influence of lead pipes on water, by forming, on the inside surface of the pipes, an insoluble sulphuret of lead, which has proved so effective that, after simple distilla-

tion, no trace of lead can be detected in water which has remained in the pipes for a long time. The operation, which is a very simple one, consists in filling the pipes with a warm and concentrated solution of sulphuret of potassium or sodium; the solution is left in contact with the lead for about fifteen minutes. Commonly, a solution of sulphur in caustic soda will answer the purpose, and produce, practically, the same results. It is known that sulphuret of lead is the most insoluble of all compounds of lead, and nature itself presents an example which justifies the theory of Dr. Schwarz, since water extracted from the mine of Galena does not contain lead, a fact which has often occasioned surprise. —*Journal of Applied Chemistry.*

New Method of Treating Abscess.—Mr. Joseph Lister, F.R.S., Prof. of Surgery in University of Glasgow, has sent a communication to the *Lancet* in which he describes a new method for treating abscess, by which he claims more than ordinary good results. His process is based upon the exclusion of those atmospheric germs which are supposed to keep up by their decomposition the pyogenic acid. The mode in which this is accomplished is as follows:

A solution of one part of crystallized carbolic acid in four parts of boiled linseed oil having been prepared, a piece of rag from four to six inches square is dipped in the oily mixture, and laid upon the skin where the incision is to be made. The lower edge of the rag being then raised, while the upper edge is kept from slipping by an assistant, a common scalpel or bistoury dipped in the oil is plunged into the cavity of the abscess, and an opening about three-quarters of an inch in length is made, and the instant the knife is withdrawn the rag is dropped upon the skin as an antiseptic curtain, beneath which the pus flows out into a vessel placed to receive it. The cavity of the abscess is firmly pressed, so as to force out all existing pus as nearly as may be (the old fear of doing mischief by rough treatment of the pyogenic membrane being quite ill-founded); and if there be much oozing of blood, or if there be a considerable thickness of parts between the abscess and the surface, a piece of lint dipped in the antiseptic oil is introduced into the incision to check bleeding and prevent primary adhesion, which is otherwise very apt to occur. The introduction of the lint is effected as rapidly as may be, and under the protection of the antiseptic rag. Thus the evacuation of the original contents is accomplished with perfect security against the introduction of living germs. This, however, would be of no avail unless an antiseptic dressing could be applied that would effectually prevent the decomposition of the stream of pus constantly flowing out beneath it. After numerous disappointments, I have succeeded with the following, which may be relied upon as absolutely trustworthy. About six teaspoonfuls of the above-mentioned solution of carbolic acid in linseed oil are mixed up with common whiting (carbonate of lime) to the consistence of a firm paste, which is in fact glazier's putty with the addition of a little carbolic acid. This is spread upon a piece of sheet block tin about six inches square; or common tinfoil will answer equally well if strengthened with adhesive plaster to prevent it from tearing, and in some situations it is preferable, from its adapting itself more readily to the shape of the part affected. The putty forms a layer about a quarter of an inch thick; it may be spread with a table-knife, or pressed out with the hand, a towel being temporarily interposed to prevent the putty from sticking to the hand or soiling the coat-sleeve. The tin thus spread with putty is placed upon the skin so that the middle of it corresponds to the position of the incision, the antiseptic rag used in opening the abscess being removed the instant before. The tin is then fixed securely by adhesive plaster, the lowest edge being left free for the escape of the discharge into a folded towel placed over it and secured by a bandage. This dressing has the following advantages: The tin prevents the evaporation of the carbolic acid, which escapes readily through any organic tissue such as oiled silk or gutta-percha. The putty contains the carbolic acid just sufficiently diluted to prevent its excoriating the skin, while its substance serves as a reservoir of the acid during the intervals between the dressings. Its oily nature and tenacity prevent it from being washed away by the discharge, which all oozes out beneath it as fast as it escapes from the incision; while the extent of the surface of the putty renders it securely antiseptic. Lastly, the putty is a cleanly application, and gives the surgeon very little trouble; a supply being daily made by some convalescent in a hospital, or in private practice by the nurse or a friend of the patient; or a larger quantity may be made at once, and kept in a tin canister. The dressing is changed, as a general rule, once in twenty-four hours; but if the abscess be a very large one, it is prudent to see the patient twelve hours after it has been opened, when, if the towel should be much stained with discharge, the dressing should be changed, to avoid subjecting its antiseptic virtues to too severe a test. But after the first twenty-four hours, a single daily dressing is sufficient. The changing of the dressing must be methodically done, as follows: A second similar piece of tin having been spread with the putty, a piece of rag is dipped in the oily solution, and placed on the incision the moment the first tin is removed. This guards against the possibility of mischief occurring during the cleansing of the skin with a dry cloth and pressing out any discharge which may exist in the cavity. If a plug of lint was introduced when the abscess was opened, it is removed under cover of the antiseptic rag, which is taken off at the moment when the new tin is to be applied. The same process is continued daily till the sinus closes.

Longevity in England.—Among the deaths registered in England in the year 1865, there were twenty-one men and sixty-eight women above a hundred years old, viz.: five men and twenty-five women, aged one hundred; four men and fifteen women, aged one hundred and one; five men and eleven women, aged one hundred and two; three men and four women, aged one hundred and three; one man and seven women, aged one hundred and four; two men and four women, aged one hundred and five; one woman, aged one hundred and six; one man and one woman, aged one hundred and ten.

Population of the Earth.—In the first volume of Dr. Behm's "Geographical Annual," lately published at Gotha, there is an interesting article on the population of the earth. This was estimated by Busching in 1787 at 1,000,000,000, by Fabri and Stein in 1800 at 900,000,000, by Horschelmann in 1833 at 872,000,000, by Dieterici in 1858 at 1,288,000,000, and by Kolb in 1865 at 1,220,000,000. Dr. Behm estimates it at 1,350,000,000, thus distributed: Europe, 285,000,000; Asia, 796,600,000; Australia and Polynesia, 3,850,000; Africa, 188,000; and America, 74,500,000. At the same time he acknowledges that it is impossible to arrive at anything more than an approximate notion of the population in Asia and Africa, there being no census or other accurate means of ascertaining the number of inhabitants in those continents.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, November 1, 1867.

MEDICAL PROPHETS.

THERE is nothing so encouraging to the physician as the absolute confidence of his patient. The thought that his actions are approved by the one who has entrusted life to his hands serves to assuage, in a degree which nothing else can, the many anxieties and perplexities to which every practitioner is more or less a prey. There is in such an understanding a mutual sharing of a responsibility, which is encouraging to both parties, and enables each to perform to infinite good advantage his duty to the other.

This blind belief in the skill and understanding of the physician is not so strong as it has been; but this is not so much due to the patient as to the physician. The former does not of choice barter the comforts of such a faith in the wonderful properties of drugs, and in the immaculate opinions of the doctor, for the present fashionable and hollow gratification of sneering at medicine as an uncertain science. To very many the mere summoning of a physician means recovery; and his presence in the sick-chamber has not inaptly been likened in effect to that of a ministering angel.

But these, alas! are getting to be in the minority. We have no hesitation in saying that one of the main reasons for this has reference to the propensity among us of making ourselves almost prophets. We are not content to trust to nature and our remedies, but are constantly accustoming ourselves to indulge in unreasonable and thoughtless conjectures as to the issue of the disease, and most generally, in nine cases out of ten, stultifying ourselves in the eyes of our patients by a false prognosis. Nothing, in our opinion, tends more certainly to destroy the confidence of a patient in his medical adviser, than to have it become apparent that such a mistake has been made. Among physicians the reasons are in the main obvious enough; but to outsiders, who have not sufficient knowledge of the laws of disease, and their disposition to an ofttimes treacherous modification, there is no excuse, save that which refers to culpable ignorance. How often we have had occasion to hear that such and such an individual, apparently in perfect health, had been condemned to speedy death years before by his physician; and how often we have thought that the disagreeable reflection which is thereby cast upon the skill of our brother might have been prevented by more caution on his part. There is hardly a community that can be found in which some such story of this kind concerning a practitioner is not afloat. The error lies more in condemning our patients too soon to death than in promising them a cure. We are not, in truth, sufficiently well acquainted with the curative power of Nature to enable us fairly to appreciate it. An old practitioner once gave us the advice never to deliver a child to death until the breath had actually left the body, for truly did he say that care and patience might fan the slightest spark of animation into a blaze of reaction. Every practitioner in midwifery can attest the truth of this from the moment the child becomes an independent being; and it is only because many of us forget that the vital principle in a child of two years of age is as strong as it was at birth that we are so ready to give unfavorable prognoses in such cases.

Virtually, the same facts may apply to the constitutional stamina of different cases; for in very many we find most astonishing recoveries taking place in the very face of death itself, and in contradiction to all the legitimate relations between cause and effect. How often have such cases actually rallied under the very hand of the one who had already cut the sufferer loose from every human hope! If, in such an instance, the physician has given a cautious prognosis, he gains the credit of a remarkable cure; but if otherwise, he is not only cheated of his just meed of praise for the proper management of the case, but is called an ignoramus besides.

Another foolish practice is that of predicting the time of death. It is a temptation into which many have fallen, and the majority have had reason to be chagrined at many an inexplicable mistake.

We recollect a case in point, in which a female was shot, and the ball having entered a vital part, the patient was allowed only an hour to live. The public took a great interest in the unfortunate victim; and, to satisfy the cravings for news, bulletins appeared daily for a month or more, predicting an almost hourly death, until many of the secular papers were forced to comment upon the value of an opinion so obviously faulty. Finally, a long time after, the patient did actually die, but evidently not for the reason that the doctor said she must.

If we perchance make a wrong diagnosis, the mistake is by no means so apparent to our patient; but let us by any miscalculation surrender to death a sufferer who is determined to live despite our decision, and we give to the laymen an incontestable and glaring proof of our ignorance—a something which to them cannot be explained away by any of the subtleties of medical logic.

The constant occurrence of these mistakes should

teach us the all-important lesson, to be on our guard in giving any prognosis, but leave, as we have a right to do, a loophole through which we can save the integrity of our opinion. When we consider how impossible it is to foretell death in the vast majority of instances, it is surprising to find how physicians will hazard their reputations as skilful observers, by predicting the result in such positive terms.

It is natural for the patient's friends to be anxious in regard to the result of the case of the sick one, but they cannot, in reason, ask for anything more than an opinion. The physician can give this in a sufficiently qualified way, not only to satisfy his questioner, but protect himself in case the result be such as had not been anticipated. But the trouble with most of us who have not been unfortunate enough to make any mistake in prognosis is, in the ecstasy of a presumably correct diagnosis, to rush, by way of bolstering it up, at once into a prognosis which is too apt to be unqualifiedly *pro* or *con*.

Every one who has been long in practice has proved to himself the great uncertainty of death as well as of life, and has learned to make his calculations accordingly. The very useful lesson to be learned is that of never surrendering the patient to death with folded hands, but standing by his bedside as a faithful minister to the last, hoping that, if a cure cannot be effected, the malady may be at least mitigated in the severity of its symptoms, and the coming of death retarded. In the present state of our science it is, to say the least, hazardous for any medical man to give up his case as absolutely hopeless, and allow any assertion to overreach the bounds of probability. Aside from the capriciousness of nature, and the modifying effects of different constitutions, idiosyncrasies, and other no less important conditions, the chances are that a mistake in diagnosis may be made which, as the foundation of all prognoses, would render the latter valueless. Another reason is, we do not study the approach of death enough.

The haste to give up a case in despair explains in one way the success of the charlatans, who are ever ready to seize upon the so-called desperate ones and make capital of them. If, under such circumstances, a mistake is made, as is too apt to be the case, and the patient gets well, it is of course due to the remarkably curative powers of the quack's nostrum.

As probably nearly every member of our profession has read the Code of Medical Ethics adopted by the American Medical Association, and having read, could not well avoid being impressed with the lightness of its burdens, we presume it will be unnecessary to state that its edict is a sermon against the recognition of quackery in any and every form. There is no attempt whatever to conceal its animosity toward all unmanly subterfuges, and none to entrap the unwary—its language is told simple, unmistakable—it confers certain immunities, and demands certain conditions in return. No man is dragooned into obedience to its laws—the act must be voluntary, and the step taken with circumspection. We are led to make these remarks in view of a recent episode in the proceedings of the N. Y. Academy of Medicine, which the public press is determined shall pass into history.

The facts are these: One of its fellows was arraigned for violating the code, in that he had held repeated consultations with "a homœopathic physician, so called." The charge was admitted, but sought to be extenuated on the ground of ignorance regarding the professional heresies of one of the parties in question. The plea failed, and the Academy adopted the recommendation of its committee on ethics, that the delinquent be suspended from membership for an indefinite period; at the same time intimating that after due penitence and recantation, he would be restored to former privileges. The case being lost, and the verdict esteemed "a blessing in disguise," the determination "to die game" was neither surprising nor unnatural. The kind intentions of the committee being thus thwarted, assumed the character of a misapprehended mercy, and the victim, by the aid of the secular press, has since been advertised into the seventh heaven of martyrdom.

"He has been kicked out of the Academy," says the *Tribune*. "His parchment is of no more use to him now than if he had cut it out of a drum-head. Whatever may have been his services to the sick and suffering during his twenty-three years' practice, whatever his accuracy in diagnosis, his skill in prescription, his faithfulness to duty, his success, his reputation, his general standing among physicians—there is no doubt about him now; he is a pariah and an outcast. He need not expect any more fees. He may take down his sign and sell his gig. Patients are warned to keep away from him, and, to use the language of one of the 'regular' gentlemen who have brought upon him this dreadful doom, he is probably at the present moment 'wandering alone' in this great city and dying 'a living death.'"

The spectacle is a moving one, and slightly melodramatic, but there is a painful impression of blue fire, the first murderer, and the slow music.

Meanwhile, too, the Academy, after these terrible onslaughts, is beginning to recover its self-possession, and to become accustomed to its bereavement; the victim of persecution has had the advantage of first-class notices in the *Times* and *Tribune*, some bad rhetoric has been expended, and all the parties are to be supposed as being very well pleased with the denouement.

Our attention has been called to an oversight of our own in a recent report of the lecture by Dr. Warren Stone on yellow fever. By mistake of the reporter the lecture is represented as having been delivered in Bellevue Hospital instead of Bellevue Hospital Medical College. We make the correction with pleasure, particularly since we are also indebted to the pub-

lic spirit of this flourishing college for the very acceptable lecture of T. Spencer Wells.

The different medical colleges have regularly inaugurated their winter courses, and the attendance of students is generally as large as it has ever been heretofore, and there is, besides, a reasonable prospect of an increase. All our schools are well managed, and richly deserve encouraging patronage.

Reports of Societies.

N. Y. PATHOLOGICAL SOCIETY.

STATED MEETING, SEPTEMBER 11, 1867.

DR. WM. B. BIBBINS, CHAIRMAN *pro tem.*

CANCEROUS DISEASE OF THE SIGMOID FLEXURE.

DR. SAYRE exhibited a specimen of which he gave the following account:

On the 7th of July, I was called about one o'clock at night, by Dr. Davis of this city, to see a patient in 19th street, who was said to be suffering from obstinate constipation, with the request that I should bring some injecting instruments. The man was 46 years of age, remarkably stout and healthy-looking, and weighing about two hundred and fifty pounds. He stated that being an active business man, he had enjoyed remarkably good health, not having been laid up with sickness for twenty years past. I found his abdomen distended to its utmost capacity, and the patient making all the time ineffectual efforts at stool. This was Tuesday, and he had had no passage since the Saturday previous, when, as he stated, he had his usual difficulty at stool which he had suffered from for a year past, consisting in the necessity for an injection. During this latter period, however, he had never been so troubled as to seek for medical advice. The physician had been trying to get a passage through him for the past two days, but without success. By exploring his anus with the finger I could find no obstruction, but on passing up a flexible rectal bougie for eight or nine inches, I came across a positive stricture, which was so firm that I could not penetrate it at all. The abdomen was very much distended, and he being very fat withal, it was some time before I could satisfy myself of the existence of a tumor in the situation of the sigmoid flexure. Having settled upon this diagnosis, I stated that there was no hope for him, and that he most certainly must die very soon. He received the intelligence very composedly, and died at the end of twenty-four hours after.

On making a post-mortem examination, twenty-four hours after death, the colon was found immensely distended, in some places being as large round as a man's arm. There was no enteritis present, neither was there any general peritonitis to be met with. At the sigmoid flexure a hardened mass was discovered, which was impervious to water from above and below. On removing the mass subsequently, it was found to block up the gut so completely as to barely admit the passage of a fine probe. The tumor was scirrhous-cancer, and it was very remarkable that a disease so extensive as this has been, as is seen by the specimen, could have existed without pain, or any serious inconvenience, until within a few days of his death.

PUERPERAL CONVULSIONS OCCASIONED BY ALLOWING PLACENTA TO REMAIN TOO LONG IN UTERO—A HOMŒOPATHIC MISTAKE.

DR. SAYRE next presented a specimen which he said was interesting, not strictly in a pathological point of view, but in connection more particularly with the circumstances which brought it to light.

At the last meeting of the society, June 27, he was suddenly called away by a gentleman, who met him at the door, with the statement that his (the messenger's) daughter was dying, and that he should immediately repair to the house. On the way thither he stated that his daughter had been confined the evening before at five o'clock, and was attended by Dr. ——— of this city, a prominent homœopath, who, after having delivered her of a fine healthy boy, had left the house with an assurance to the patient and her friends that everything was all right. In the course of a few hours afterwards, the homœopath was summoned in great haste to find his patient in a convulsion. He then called in another distinguished homœopath in consultation. They together were with the patient most of the day, during which time she had frequent convulsions. Finally, at nine o'clock in the evening, they stated that it was impossible for her to survive, and a clergyman was accordingly sent for. As Dr. Sayre entered the house, the mother of the patient came down to state that the two homœopaths had just left, and that a marked change had come over her daughter, that the medicine was beginning to act, and that they thought that there was just one chance in a thousand for recovery, and begged that Dr. S. should not see her for fear that any change of treatment might be positively fatal. The father accordingly apologized, and Dr. S. was about leaving, when a servant came down to say that Mrs. A—— was in a fit. Dr. Sayre was then requested to see the patient, and found her in a severe convulsion; her tongue was protruded from her mouth, covered with bloody froth which issued also from the nostrils, while her face was black. Girdling her arms and legs with handkerchiefs, and by *sudden twitches* producing a shock on her nervous system, and by artificial respiration he succeeded in restoring the circulation, which had nearly ceased. He then proceeded to examine the uterus. He found the os largely dilated, and then felt what he supposed to be a clot of blood, but on passing his hand up into the cavity of the organ, he found that the mass was too large to be taken away without danger from hæmorrhage, and accordingly administered ergot to expedite matters. As the result, the mass was removed, which proved to be the *placenta* entire, with the exception of a small piece that had been torn off with the cord.

In conclusion, he stated that he thought that it was his duty to report the case as he had done, in order to expose to the community a fair sample of homœopathic practice.

In answer to a question from Dr. Eliot, he stated that no other cause for the convulsions than the placenta in utero was found in the case cited, there being no uræmic poisoning discoverable. The patient subsequently recovered.

DR. ROGERS believed with Dr. Sayre that the result of the case proved conclusively the cause of the convulsions.

DR. POST, in reference to Dr. Sayre's first case of cancer of sigmoid flexure, remarked that he had a brother who died at the age of twenty-nine years, who had no passage from the bowels for a period of nearly three weeks.

INFLAMMATION OF THE COLON AND OTHER CONSEQUENCES OF ARTIFICIAL NURSING.

Dr. Lewis Smith exhibited a specimen of inflammation of colon removed from the body of an infant who died at the age of one year and six months. This history was briefly told: The child was brought up by hand, and as is usually the case with such children, when the summer commenced it began to be affected with looseness of the bowels. The diarrhœa lasted through the months of July and August, and towards the last it was accompanied with the usual symptoms of progressive emaciation. About two weeks before the death of the child it became very drowsy, and vomiting, which before had only been occasional, now became more frequent. Death occurred from the comatose state in part, but mostly from exhaustion. At the time of death the emaciation was not marked. The evacuations during the sickness, according to the statement of the physician in attendance, were of a brownish or yellowish-brown color. There was never any discharge of blood.

On making the post-mortem examination the stomach was found in its normal state, the small intestine exhibiting here and there evidences of slight vascularity, but the mucous membrane of the large intestine was found remarkably thickened, roughened, and congested, as in colitis of the adult. This condition of things extended over the entire mucous membrane of that portion of the intestinal canal. There were no ulcerations.

On opening the thoracic cavity both lungs could be fully inflated, with the exception of a little nodule on the posterior aspect of the lower lobe of the right lung. The left lung could also be readily inflated, with the exception of the tongue-like process of the upper lobe and the lower margin of the inferior lobe. On examination of these parts, Dr. S. was of the opinion that their conditions were not due to pneumonia, but to a state of protracted collapse of the lung, continuing so long that it was impossible with the utmost force to inflate them.

On account of the prolonged drowsiness, it was of interest to ascertain the condition of the brain and meninges. That organ was normal in appearance, but the cavity of the arachnoid contained about four or five ounces of serum. There was also considerable effused fluid found in the lateral ventricles. The sinuses contained more than the usual number of clots, most of which were soft and red, while a few were white and quite firm, thereby giving evidence of their antemortem formation.

Dr. Smith, in conclusion, remarked that there were several points of interest in this case. The first had reference to the existence of such intense colitis and rectitis, without any evacuation of blood. He believed that in the colitis of the young infant this was not uncommon; in fact, Bouchout affirmed that dysentery was very rare in the young infant. The collapsed condition of the lungs at different points was another object of interest; and lastly, the condition of the brain being that of spurious hydrocephalus, deserved to be noted. In answer to a question from Dr. Rogers, he remarked that the fontanelles were depressed, as was commonly the case in all similar instances in very young children.

Dr. Rogers asked if the remark of Dr. Smith, in regard to the frequency with which children brought up by hand suffer from diarrhœa in the summer months, was amply borne out by facts.

Dr. Smith thought that as far as city children were concerned, it was.

Dr. Eliot remarked that there was one reason why it should be so, from the fact that the milk was most apt to spoil in hot weather.

Dr. Bibbins stated that among the lower classes the statement of Dr. Smith was especially true.

RUPTURE OF AORTA, PERICARDIUM, AND PLEURA.

Dr. Delafield exhibited a specimen of heart and annexa, taken from the body of a woman who was found dead in the street. She was apparently forty-five years of age, rather fat than otherwise, and various parts of her body and limbs were covered with bruises. There were no marks of violence about the head. No history was obtainable. On opening the chest the left pleural cavity was found filled with partially clotted blood. On the anterior surface of the pericardium there was a long rent through it, extending from the base almost to the apex of the sac; and on examining the heart itself, there was found in the aorta, just above the insertion of the aortic valves, a transverse rupture through all the coats of the vessel, surrounding which were several patches of atheroma. There were no changes in any other organs save the kidneys, the left one being loaded with small-sized cysts, and the right being in an advanced stage of fatty degeneration. The cause of death was, of course, a rupture of the aorta, the blood escaping first into the pericardium, and thence through the slit in that sac into the pleural cavity of that side.

GRANULAR KIDNEYS, ETC.

Dr. Finnell exhibited a pair of small granular kidneys taken from the body of a patient of Dr. Garrish, twenty years of age. She had been under the care of that gentleman two months previous to death. She presented during that period the usual symptoms of Bright's disease, severe headaches, vomitings, œdema of the face and extremities, etc. Her vision at times was so much disturbed by fatty degeneration of the retina, that she could scarcely see at all. The attending physician stated that the day before her death she was seized with a violent pain in the left side, attended with cough and dyspnœa. The diagnosis of pleuro-pneumonia was made and confirmed by Prof. Clark, who saw the patient in consultation. She gradually sank, and died the next morning.

The strange thing about the case was that at the autopsy no special lesion to account for death was found in the chest, and instead of pleuro-pneumonia, there was a simple œdema of both lungs.

A MUSEUM OF PATHOLOGY.

Dr. Finnell presented a second specimen on behalf of Dr. Leo, which also consisted of a pair of granular kidneys. These were removed from a man thirty years of age, who, being a driver on one of the city cars, was severely beaten by some rowdies, and died the following morning in Bellevue Hospital.

The post-mortem examination revealed such extensive disease in different parts of the body, that it became an interesting question whether the beating was the direct cause of death or not. There was cirrhosis of the liver, tubercles in the lungs, granular disease of the kidneys, and extensive extravasation of blood upon the surface of the brain, which had evidently found its way through the substance of the organ into the lateral ventricles. There were also present evidences of secondary syphilis. He had been a very hard drinker besides. Dr. F. thought it remarkable that a man with so much disease could be enabled to follow such an active occupation. He was of the opinion that death was caused by apoplexy, which had probably come on independent of the injuries.

GUNSHOT WOUND OF HEART AND LIVER.

A third specimen was also exhibited by the same gentleman, on behalf of Dr. Wooster Beach, Jr. It consisted of a gunshot wound of the heart, taken from a man who was accidentally shot in the pistol gallery of Barnum's Museum, while in a stooping position fixing the target. The ball entered to the right of the spine, fracturing the eleventh rib, passed through the liver, thence through the right ventricle at its lower portion, struck the sternum, and was lost. He walked twenty-five feet, and then fell dead.

He next presented a fourth specimen on behalf of Dr. Stirling. It consisted of the aorta with its principal branches, on the internal surfaces of which arteries were abundant deposits of atheroma. The remarkable circumstance was that the degeneration of the coats was principally confined to the posterior aspect of the vessels.

SOFTENING OF THE BRAIN—OBSTINATE CONSTIPATION.

He also exhibited, on behalf of the same gentleman, a specimen taken from a man sixty-five years of age, who five years before death became afflicted with softening of the brain, as evinced by a tottering gait and feeble intellectual powers The softening increased gradually, attended by paralysis, which was more or less extensive in different parts of the body. During the latter period of his illness he suffered from diarrhœa, which would alternate with long continued and obstinate constipation. At one time he was seventeen days without an evacuation, at another twenty-one, and at another thirty-five days. There was no obstruction of the gut to account for this. On examining the body after death the transverse and descending colon were loaded with large hardened masses of fæces, which being previously felt through the abdominal walls, gave the impression of internal tumors.

In answer to a question, Dr. Stirling remarked that the patient was an active business man, was in the habit of working his brain severely at times, and that during the thirty-five days of constipation he had no stercoraceous vomiting.

FIBRO-CARTILAGINOUS TUMORS OF EAR.

Dr. Post exhibited a fibro-cartilaginous tumor, which was remarkable on account of its seat, he having removed it from the helix of the ear of a mulatto, seven years old. It had been growing for three years. There did not seem to be any apparent cause for its appearance in that locality.

Dr. Sayre remarked that some years ago he had presented to the Society two such tumors, removed from the same positions from two different mulatto girls, caused in both instances by puncturing the ear for earrings.

The Society then adjourned.

Stated Meeting, September 25, 1867.

Dr. A. C. Post, Chairman *pro tem.*

Dr. Finnell presented the uterus and appendages of a woman twenty-five years of age, who died as the result of fallopian pregnancy. The patient was seen six hours after having been seized with violent abdominal pains, and when she was evidently in a dying condition. Her menstruation had been irregular, the last catamenia having occurred only two weeks before, which circumstance misled the doctor in making a diagnosis. She died twelve hours after the attack. At the autopsy the abdomen was found moderately filled with blood, about five pints in all. The left Fallopian tube was the seat of two enlargements; one, the smaller, nearest the uterus, was found ruptured on its proximal side; the other, larger, was situated in the fimbriated extremity, which was filled with apparently nothing more than a mass of coagulum. The left ovary contained a corpus luteum of recent formation. The uterus itself was but slightly enlarged. The patient had but one child five years before.

GUNSHOT WOUND OR FRACTURE OF THE BODY OF THE SECOND LUMBAR VERTEBRA.

Dr. Hamilton presented a conical rifle ball which he removed from a patient on the 18th of the present month at Bellevue Hospital. The case was as follows:

William Madden (enlisted as William McMahon), private 20th Conn., æt. 24, was wounded in battle, March 16, 1865, at Averysborough, N. C., the ball entering on the left side, a little above the crest of the ilium, and about four inches from the spine, and passing across deep and nearly horizontally to the right side, where it lodged. There was no evidence that any of the viscera of the abdomen were wounded. He fell immediately, and was carried to the rear, being unable to walk. There was no immediate paralysis of the bladder, but three days later a paralysis of the bladder existed to that degree that it became necessary to employ the catheter, and the urine had to be drawn for seven consecutive days. He was placed upon a water bed after a time, on account of bed sores. At the end of six months the ball was felt about four inches from the spine on the right side, but no attempt was made to remove it, probably because the diagnosis was not sufficiently positive. About one year from the time of injury he began to walk upon crutches; and about this time also, a small piece of bone escaped by the wound of entrance, containing a fragment of lead. Several other very small pieces escaped at other times. Three weeks ago, the position of the ball changed, falling lower down, so as to rest almost upon the crest of the ilium.

His condition before the operation, as stated by Dr. Hamilton, was briefly as follows: He was considerably emaciated, but well enough to walk about. The spinous processes of the first, second, and third lumbar vertebræ were unusually prominent, describing a curve backwards, such as we see in caries of the spine. They were fixed in this position; and the patient believes that no change in their form has taken place during the last two years. The wound of entrance was still open, and there were three other sinuses opening in the right groin, which evidently communicated with the first-named sinus. The bowels were tumid, tympanitic, and constipated. In making water there was often some delay, and generally some effort required to start it.

The ball could be distinctly felt in the situation before described.

The patient was placed under the influence of ether, and the ball exposed by a long and deep incision. It was easily removed by Dr. Hamilton, assisted by Dr. Pinkney, of the Bellevue Dispensary. He is now again walking about, and the discharge has much diminished.

The ball is flattened upon one side of its base, and at this point some small fragments of bone are embedded in its substance.

There are two points of interest in this case. *First*, that although the body of the vertebra was hit, there was no immediate paralysis of the bladder—the paralysis of the bladder taking place three days later, and no doubt as a consequence of the inflammation which ensued. *Second.* The case is of interest in that he has a fair prospect of complete recovery. It is quite cer-

tain that the lesion of the spine has been completely repaired long since; and there is every reason to believe that nothing but the presence of the ball has perpetuated the sinus.

In the Surgeon-General's report, Circular No. 6, one hundred and eighty-seven examples of gunshot fracture of the vertebræ are reported, of which one hundred and eighty died, and of the seven which recovered not one was a fracture of the *body* of a vertebra. There are collected in the Military Museum at Washington, sixty-six specimens of gunshot lesions of the spine and cord.

It is certainly very rare that patients recover after these accidents; but it must not be forgotten that one anatomical circumstance gives the patient some additional chances when any of the vertebræ below the first lumbar are hit in the adult.

In the child, at birth, the spinal cord extends as low down as the third lumbar vertebra, but in the adult no lower than the top of the second; here it terminates in a leash of nerves, which are firmer than the cord, and lying side by side in a common sheath, they slide upon each other, and do not probably suffer so often from concussion or compression. Mr. Alexander Shaw, to whom we are indebted for this explanation, has seen four examples of fracture of lumbar vertebræ below the second, unaccompanied by any degree of paralysis, and which were followed by speedy recovery.

Dr. Hamilton called attention to the fact that in this case the ball could not have struck the body very superficially, as in that case it must have wounded the vena cava, or the aorta, and it was probably an example in which the ball penetrated the centre of the side of the vertebra, making perhaps a round hole, of which several examples have been reported from time to time, or it may have passed in a deep groove, made on the anterior surface of the body of the vertebra.*

Dr. Post referred to a case that came under his notice at the Chesapeake Hospital, Fortress Monroe, in which a ball, after having traversed the soft tissues for a distance of nine inches, was very much flattened. The explanation for this seemingly extraordinary circumstance was, that the missile had, previous to entering the body of the patient, been flattened by striking against a tree.

CARIES OF THE TARSUS.

Dr. Kœhler exhibited a specimen of extensive caries of the tarsal bones necessitating amputation of the leg. The disease took its origin from an injury to the foot occasioned by a misstep into a hole, a year ago, since which time it gradually extended until it involved all the small bones of the ankle in destruction. Shortly after caries declared itself, a small portion of the os calcis, as well as of the astragalus, was removed with a view to arrest the progress of the disease, but the result was very unsatisfactory. There was a time when amputation at the ankle would have been practicable, but the patient refused then to have the operation performed, but subsequently, on account of the severe pain which the progress of the disease occasioned, he gladly consented to have the limb removed higher up. This operation was successful, and from last accounts the promises for recovery were good.

AN INTERESTING CASE OF ANEURISM.

Dr. O. H. Smith exhibited a specimen of aneurism, of which he gave the following account:

The patient was a seafaring man, forty-five years of age, who enjoyed good health up to a year ago, when he commenced to have pain in his chest, attended with cough and some dyspnœa. This condition of things increased, and at the end of seven or eight months from his first attack I saw him. He had previously been under the charge of another physician, and Professor Clark had seen him in consultation. Dr. Clark on his first visit was unable to say what he thought was the matter, but on the second visit he said that there was some enlargement of some of the vessels of the thorax, meaning aneurism. He advised tincture of aconite, evidently to control the heart's action. The physician had exhausted all his energies upon the case, and he being discouraged, I was requested to take charge of the patient. I found that he could lie only on his back, inclining a little to the right, bolstered up with pillows. Any effort on his part was sure to increase his difficulty in breathing, and even the mere swallowing of food would at times give rise to paroxysms of dyspnœa which were quite suffocative in character. He presented very much the appearance of a person in a perpetual paroxysm of severe asthma. His pulse in both wrists was soft and natural, and there was no increased pulsation in the arteries of the neck. On examining his chest nothing could be heard beyond the asthmatic breathing over every part of his thorax, and the dyspnœa was so great that he could not hold his breath that I might have an opportunity to listen to the heart sounds. The case looked to me like obstruction of the trachea either from within or without. There was no dulness over any part of the chest, but Dr. Clark had said it was aneurism, and I must accept the diagnosis although I could not see it. In the course of eight days after I saw him he sank and died.

The autopsy was made twelve hours after death. The lungs were found to be healthy. The trachea and surrounding parts were divided high up, with a view of turning out the whole viscera, when it was discovered that the aorta was firmly adherent to the spinal column. The parts were then more carefully examined *in situ*, when it was observed that the descending aorta, from the left subclavian down, was occupied by an aneurism about six inches long. The aorta was then forcibly torn from its attachments to the spinal column, when it was discovered that there was a groove along the spinal column upon its anterior surface; this groove was one-half or three-fourths of an inch in width, and from two to three inches in length. The aorta was attached to the spinal column on either side of this groove, the posterior wall of the artery having been obliterated by friction, or pressure of some kind. As this tumor was torn out, two large, firm, fibrinous clots were taken from it. These two clots occupied the anterior portion of the vessel, while the current of blood circulated behind, in the groove referred to. On further examination it was discovered that the ascending aorta, from the heart up to within half an inch of the innominata, was very much dilated and funnel-shaped. The descending aorta showed evidences of atheroma, and particularly upon the posterior aspect of the vessel. In the ascending aorta there were no signs of atheromatous deposit. The arch of the aorta, from the innominata to the left subclavian, was normal, which explains why there was no abnormal pulsation in the vessels of the neck, or of their branches. The œsophagus lay upon the right border of the spinal column from the arch of the aorta down, and the trachea rested upon the œsophagus. The trachea passed under the arch of the aorta, and the left bronchus passed over this tumor. The continual pressure of the tumor upon that left bronchus would explain the constant difficulty

* At the next meeting of the Society, October 9, 1867, the patient was himself brought into the presence of the members and examined, the diagnosis, as to the seat and character of the injury, being fully confirmed by all who were present.

of breathing. The patient died of asphyxia as do children with membranous croup.

Dr. Rogers moved that a committee be appointed to report on the specimen presented that evening by Dr. Finnell, which motion being carried, a committee of two, consisting of Drs. Rogers and Finnell, was named.

The Society then adjourned.

THE NEW YORK MEDICO-LEGAL SOCIETY.

Stated Meeting, October 8, 1867.

Dr. Thomas C. Finnell, President, in the Chair.

THE METHOD TO BE ADOPTED IN AUTOPSIES.

The points of discussion were taken up in the following order: notes, instruments, the surroundings of the body, the autopsy with the necessary concomitants of external inspection, examination of the head, thorax and abdomen, spine and limbs.

For notes, it was recommended that paper with printed heads be used referring to the information required. Time of commencing must always be stated.

The instruments should be as few as possible. Those generally employed were recommended, excepting the mallet and chisel. The best needle is the ordinary sail-maker's needle, sold at a trifling cost at all hardware stores. Its edges should be ground sharp.

In criminal cases, the various objects near the body should be examined with great care and their position entered in the notes. Too great caution cannot be exercised.

In the external examination, the body should be viewed from head to foot. Sugillation, and all other marks must be noted. The position of the limbs must be carefully observed; also the amount of decomposition and abdominal swelling. The location of the marks, etc., must be described by actual measurement.

In opening the head, the use of the mallet and chisel was objected to by some, as a fracture of the skull might result from their employment, where none existed before. To retain the skull-cap in place, Dr. Finnell's method of driving French nails far enough into the diploë of the stationary portion at the occipital bone to hold securely, then bending them so as to prevent the movable portion from sliding backwards, was explained; and also Dr. W. Beach's plan, consisting of a wire bent into loops, opening in contrary directions, in which the upper and lower cut sections were placed and held in position. Both these contrivances were intended to hold the bone in place, and prevent the unsightly mark in the forehead, where the edges do not approximate. A method to accomplish the same object was used by Dr. J. Beach. The line taken by the saw anteriorly, ran just over the forehead, the mark being hid by the hair.

To inspect the chest and abdomen, an incision from behind the symphysis of the maxillary bone to the symphysis pubis, was advocated, allowing the tongue, and contents of the neck and thorax, to be turned out. The disfigurement caused by this mode was thought sufficient, by some members, to prevent its general adoption. To lessen the flow of blood in taking out the heart, placing ligatures on the cavæ was suggested. Dr. Finnell illustrated his method of opening the heart, by which both sides of the organ were completely exposed. A number of valuable practical suggestions in this branch of the subject were made, but our space will not admit of further detail.

London Mud.—Thirteen per cent. of the mud in London is said to be abraded iron.

Correspondence.

THE QUESTION OF PRIORITY.

To the Editor of the Medical Record.

Sir—In the absence in Europe of my partner, Dr. Charles F. Taylor, will you allow me a small space in the Record for the publication of a few words in regard to the "question of priority" between Drs. Sayre and Taylor, as to the invention and use of a short splint in the treatment of hip-disease?

If I understand the matter, Dr. Sayre has raised a false issue, both in his letter of July 24, 1861, published in the *American Medical Times*, and in the one just published in the last number of the Record.

I understand Dr. Taylor's claim to be this, viz.: That he (Dr. T.) first devised and used a splint *with a cross-piece and joint at the top*, and with a *branch* to take the adhesive straps from the *inside* of the thigh. These peculiarities, which constitute the distinctive features of that splint, Dr. Sayre has adopted; the instrument has been labelled as "Sayre's," and, if we mistake not, Dr. S. has figured it in a published article as his own.

As to Dr. Taylor having "promised to publish a correction" of his "error," I can safely leave it for him (Dr. T.) to explain, on his return from abroad.

Respectfully yours,

W. E. Vermilye.

1808 Broadway, Oct. 4, 1867.

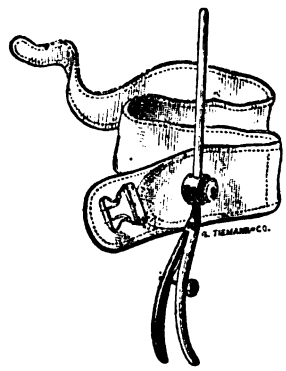
New Instruments.

EUSTACHIAN CATHETER HOLDER.

By O. D. POMEROY, M.D.,

new york.

The accompanying cut represents an instrument for holding the eustachian catheter in position, which may involve some principles of construction not often observed.



The band passing around the head and fastening the instrument to the forehead, is made of leather, instead of elastic material, to hold more firmly, as any giving is contra-indicated. The clamp which holds the catheter by means of a small thumb screw, passes vertically through a round aperture in a small post, placed at right angles to the forehead plate (of iron), which allows it to slide up and down through a circular aperture, which permits the clamp to revolve upon its axis; the whole fastened by a screw at the top of the post. Within the iron plate the post is fastened with a pivot-like arrangement, which allows the clamp to be moved from one nostril to the other.

In the cut the clamp is pushed so far up as to be above the level of the catheter. When adjusted, we have only to loosen the screw in the forehead piece, and allow it to drop down sufficiently to catch the catheter, when both screws are tightened. The advantage of this instrument over some others is—the ball and socket-joint at the forehead, which is easily worn out, and does never hold the catheter so as to perfectly prevent any antero-posterior movements, is here dispensed with, and the lateral pivot-like movement which allows the clamp to swing to either nostril without any screw adjustment, is peculiar to this instrument alone, as far as I know.

Some object to the use of the catheter-holder in toto; but when we reflect on the ease with which the catheter is displaced, and the attendant pain, the necessitating an extra hand for its management (unless the operator is very skilful), and the difficulty of introducing the bougie through a movable catheter, it seems to me its value must be conceded.

Obituary.

PROFESSOR ROBERT WATTS, M.D.

NEW YORK.

Robert Watts, M.D., the widely known Professor of Anatomy in the College of Physicians and Surgeons, N. Y., whose death occurred at Paris, September 8th, was born August 31, 1812, upon what is now the site of St. John's College, Fordham, Westchester county, N. Y. Having graduated from Columbia College, N. Y., in 1831, he began his medical studies in the office of Professor Willard Parker, the while attending the schools in Pittsfield, Mass., and Woodstock, Vt. Subsequently, however, he became the pupil of Professor Alexander H. Stevens in New York, and finally received his diploma from the College of Physicians and Surgeons, in 1835.

Dr. Watts early evinced a preference for the study of anatomy; and the proficiency which was the natural result of his zeal, well qualified him while yet a student for the duties of assistant to his preceptor, then Professor of Anatomy at the Woodstock College. After four years' service as Anatomical Professor at these Eastern institutions, he accepted, in 1839, a corresponding appointment in the College of Physicians and Surgeons, and from that date commenced his residence in our city. A resignation of his former positions in 1841 enabled him to devote himself more closely to the institution, of whose faculty he was at the time of his decease the oldest member.

In 1844, Dr. Watts, together with several other prominent physicians, took an active part in the foundation of the N. Y. Pathological Society, of which for several years he was the President. He was also a Fellow of the N. Y. Academy of Medicine, and a member of the N. Y. Medical and Surgical Society, as well as the Society for the Relief of Widows and Orphans of Medical Men, and the N. Y. Medical Journal Association.

The health of Professor Watts, which as a rule was rather delicate, at length became so much impaired at the close of the last collegiate session, that, in accordance with the advice of an intimate professional friend, who had detected tuberculous disease of the lungs, he concluded to test the advantage of a sea-voyage. During the latter part of May, therefore, in company with his wife, he set sail for England. Finding the climate of that region but ill adapted to his needs, he sought the more genial weather of the Continent. Here again he was disappointed, for his disease steadily progressed, and while in Paris, on August 30th, pneumo-thorax suddenly occurred. Under this he rapidly sank, closing his pure and gentle life with the crowning graces of Christian submission and patience, regretted by "troops of friends," and respected by all.

His remains were brought home, and after the funeral services held at the church of the Ascension, October 18, ult., were placed in the vault of St. Mark's P. E. Church.

New Publications.

Books and Pamphlets Received.

Injuries of the Eye, Orbit, and Eyelids, their immediate and remote effects. By Geo. Lawson, F.R.C.S., Eng., Assistant Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and to the Middlesex Hospital; late Assistant Surgeon Rifle Brigade. London: Longmans, Green & Co. 1867.—(*From the Author.*)

Circular No. 7, War Department, Surgeon-General's Office, Washington, D.C., July 1, 1867. A Report on Amputations at the Hip Joint, in Military Surgery.

Inhalation, its Therapeutics and Practice. A Treatise on the Inhalation of Gases, Vapors, Nebulized Fluids, and Powders, including a description of the apparatus employed, and a record of numerous experiments, etc., etc. By J. Solis Cohen, M.D. Philadelphia: Lindsay & Blakiston. 1867.

A Contribution to the History of the Hip-Joint Operations performed during the late Civil War; being the Statistics of 20 cases of Amputations and 13 Resections at this articulation in the Southern Service. By Paul F. Eve, M.D., Prof. of Surgery in the University of Nashville, Tenn.

Transactions of the Medical Society of the State of Pennsylvania, at its 18th Annual Session. Fourth Series. Part III. Phila. 1867.

Synopsis of a Course of Lectures on Materia Medica and Pharmacy, Delivered in the University of Pennsylvania; with five lectures on the Modus Operandi of Medicines. By Joseph Carson, M.D. Fourth edition revised. Phila.: H. C. Lea. 1867.

The Practice of Medicine and Surgery applied to the Diseases and Accidents incident to Women. By Wm. H. Byford, A.M., M.D., Prof. of Obstetrics and Diseases of Women and Children, Chicago Medical College. Phila.: Lindsay & Blakiston. 1867.

Headaches, Their Causes and their Cure. By Henry G. Wright, M.D., F.R.C.S.L., L.S.A., etc. From the Fourth London Edition. Phila.: Lindsay & Blakiston. 1867.

Medical Items and News.

New York State Woman's Hospital.—The first portion, or one of the four quadrangular pavilions of the New York State Woman's Hospital, situate at the corner of Fiftieth street and Fourth avenue, was opened October 10th with very interesting exercises. The attendance of ladies was unusually large, and comprised a goodly number of those who are known throughout the city for their philanthropic works.

The Hon. James W. Beekman, President of the Board of Governors, presided.

After prayer by Rev. C. D. Foss, and a brief address by Mr. Beekman, in which a history of the institution was successfully reviewed, an address was delivered by

Dr. Barker, who said he was the only physician now living in the city who was thoroughly acquainted with the early history of the institution. He knew the zeal with which the profession welcomed the discovery that a surgical disease of the most distressing character, which the resources of art had heretofore failed to reach, was now by the genius and skill of Dr. Sims radically cured by one or more operations. It was evident soon after this discovery was made, that a special hospital was necessary to render available its benefits to a great majority of those requiring the operation. The Woman's Hospital Association was founded in February, 1855, with a Board of Managers consisting of thirty-four ladies. It is the work of woman for the benefit of woman. The hospital was opened on the 4th of May, 1855, with forty beds, and during the twelve years that have elapsed since that time over 400 cases have been cured of the most loathsome infirmity that woman is ever called upon to bear, by which she is debarred from all society, and made a burden to herself, and an infirmity which before was, as a rule, incurable. Within twelve years too, 1,219 cases have been discharged, cured or greatly relieved. New York City could point with proud satisfaction to the institutions which she now possesses for the relief of human suffering. The speaker here made mention of the various charitable medical institutions in the city, and spoke of the advantages they offered to the public. In again referring to the New York State Woman's Hospital, he said that not many years hence this beautiful edifice, which may now be said to be on the outskirts of the city, will be near the centre of a most prosperous and wealthy population. Who could estimate the incalculable amount of relief to human suffering which this institution is destined to afford—the number of desolate and loathsome wives, or wretched and helpless mothers, who will be restored to health and happiness? Dr. Barker next paid a feeling compliment to the surgeon in charge of the institute, and ended his address with an expression of confidence in the success of the good work thus begun.

Rev. Dr. Adams next addressed the meeting. He said he never envied Dr. Sims, but he did rejoice in the thought of the deep delight which Dr. Sims and his associates must have felt in the marvellous success which attended their efforts.

Short addresses were also made by Dr. Afred C. Post and Rev. Dr. Duryea, after which prayer was offered by Rev. Dr. Adams. The exercises were closed with singing and the benediction.

The edifice is on the French pavilion plan, and when completed will consist of a principal building on the centre of the flat, and connected with four pavilions built in quadrangular form by a series of corridors. The style is that known as the Lombardo-Italian. The exterior material of the walls is Philadelphia pressed brick, with a basement dressing of cut stone. The building will be covered in with a Mansard roof of ornamental slate, with ornamental ridge ornaments.

The main building is 160 feet in length by 40 in breadth. The first floor, intended for private paying patients, contains reception-rooms and sleeping apartments, fitted up with every requisite for comfort and convenience. The upper floors are devoted to sick wards, and are supplied with ample accommodations in the way of closets, bath-rooms, etc. On the third story is the operating-room, which is overlooked by a gallery intended for medical students. An elevator, worked by the engine of the laundry, supplies facilities for ascending to and descending from the upper portions of the edifice. Adjoining the main building is the laundry. In the basement are located two powerful steam boilers and a steam pump for heating purposes. On the upper floor are the washing-machines, capable of washing 2,000 pieces per diem, an elaborate mangling-machine, and the drying-room.

The State appropriated $50,000 toward the erection of the institution, and the city donated the site, and will in future have the right to nominate, free of charge, to one-fourth of the beds in the institution.

Though the institution will be in part self-supporting, yet it will in great part depend upon voluntary contributions. Its predecessor, the Woman's Hospital Association, numbered among its patients ladies who came from Europe for treatment.

Officers of the Medico-Legal Society.—At the late election the following were elected officers of the Medico-Legal Society: Dr. Thomas C. Finnell, President; Dr. Robert Newman, Vice-President; Dr. Simeon N. Leo, Secretary; and Dr. Augustus Wohlfarth, Treasurer.

The Zouave Jacob.—The Paris correspondent of the *N. Y. World*, after discoursing somewhat at length upon the achievements of the miracle-working Zouave, says: "General Forey was treated by Jacob after his usual fashion—that is, by a simple word of command—'Walk, because I say you can walk.' But the General himself has been too long accustomed to command to submit to the authority of a mere soldier, even if his palsied limbs were not past remedy. Jacob says that his failure in the General's case, and in many others, is not his fault; that he does not know the source of his power—pretend to discuss it, he only knows that he frequently brings relief when other remedies fail, and that he is willing to make use of his gift whenever he is asked. If he succeeds he is happy, if he fails he can only regret it. While Jacob's star was at its zenith, some new evidence of his miraculous power was published almost every day; now that it is on the wane, there is abundance of testimony against the authenticity of his cures. A story is told of a priest who, deprived of sight through a paralysis of the optic nerve, called upon the Zouave. 'Take off your spectacles,' said Jacob, 'and look me in the face. You can see!' 'No.' "But I say yes.' 'Well, then, yes.' And the ecclesiastic retired, to the great astonishment of the crowd. 'Your sight is improved, then?' said a friend to him as he was passing. 'Not in the least.' 'But please to explain.' 'Why, the fact is I did not wish to appear more stupid than the rest.'"

Medical Society of the County of New York.—Sixty-Second Anniversary.—This ancient society, which now numbers upwards of 250 members, celebrated its sixty-second anniversary, on the 21st ult., at the new Music Hall, corner of Houston and Mott streets. with a collation—nominally such—but, in its appointments and enjoyableness, really a dinner. The affair was decidedly a success; the reunion of the profession being both cordial and general. Speeches were made by Drs. Wm. W Reese, President of the Medical Society of the County of Kings; C. L. Mitchell, a delegate from that society to the State Medical Society; Edmund S. F. Arnold, President of the Medical Society of the County of Westchester; P. Stewart, of Peekskill; J. Foster Jenkins, of Yonkers; Eleazar Parmelee, President of the College of Dentistry; Alfred C. Post, President of the New York Academy of Medicine; James Knight, of the New York Society for the Relief of the Ruptured and Crippled; Professor Wm. Detmold, Dr. John P. Garrish, and Dr. Ellsworth Eliot. Excellent music enlivened the programme, and after "Auld Lang Syne," by the whole company, the guests reluctantly dispersed at a late hour.

THE NEW COLORED ORPHAN ASYLUM.—At the corner of 143d street and Tenth avenue, a new colored orphan asylum, to replace the building destroyed during the draft riots, is being erected. The style will be extremely simple, but the building will be very commodious and extensive. The dimensions of the main structure, which is to be built with all the modern improvements, are to be 234 by 100 feet.

THE NEW INFANTS' HOSPITAL OF RANDALL'S ISLAND.—It is proposed to build a new Infants' Hospital on Randall's Island. The building will cost from $100,000 to $150,000. The plans are now in the hands of Mr. Renwick, the architect, for his report.

THE INSTITUTION FOR THE BLIND in this city has one hundred and twenty-two students, half of whom are females.

THE NEW OFFICES OF THE COMMISSIONERS OF CHARITIES AND CORRECTION.—The site of new offices for the Department has been secured on the north-west corner of Third avenue and Eleventh street for $62,500—77½ feet by 100 feet in dimensions. The rooms on Bond street now rented by the Commissioners have long been ill suited for the purposes designed.

THE RELATIVE PROPORTION OF THE MEDICAL TO THE LEGAL PRACTITIONERS IN ENGLAND AND PRUSSIA.—According to a statistical article in an English paper, the number of lawyers in England is just about equal to the number of doctors, but in Prussia the doctors are nearly four times as numerous as the lawyers.

THE OPENING OF THE COLLEGES.—The College of Physicians and Surgeons inaugurated their regular season by the usual exercises, October 14th, ult. Dr. H. B. Sands, who succeeds to the chair of Anatomy, delivered the address, in which he alluded in a touching manner to the many virtues of Professor Watts, the late incumbent, and the Bellevue Hospital Medical College commenced its course with an interesting address by Prof. Frank H. Hamilton.

The University Medical College also formally opened their fall and winter course on the same evening, Profes or A. L. Loomis delivering an entertaining discourse upon the "Progress of Medical Science." The New York College of Veterinary Surgeons have likewise entered upon their duties. Professor F. D. Weisse addressed the friends of the institution assembled by invitation at the rooms of the New York Historical Society, October 2. He urged in warm terms the importance of a more thorough and extended knowledge of veterinary science. The New York College of Dentistry commenced their session October 15. Dr. J. Smith Dodge delivered the introductory address at the College in Fifth avenue, near twenty-second street.

DR. JOHN BETTS MCEWEN, of this city, died October 7 ult., of rupture of the heart consequent upon fatty degeneration, aged 59 years. He was a graduate of the College of Physicians and Surgeons, class 1831.

A NEW WORK.—Darwin, whose "Origin of the Species" created somewhat of a sensation in the scientific world, has a new book in press, entitled, "The Variation of Animals and Plants under Domestication." The work, which will elucidate the principles of inheritance, reversion, crossing, interbreeding, and selection, will be published by Murray, of London, and will consist of two octavo volumes.

RARE MODESTY.—A gentleman who refuses to have his name published, has donated to the Birmingham (England) General Hospital $50,000.

OPIUM EATING IN ENGLAND.—Dr. Hawkins, of King's Lynn, tells the readers of the *Medical Journal* that half the opium imported into England is consumed in Lincolnshire and Norfolk. One Lynn chemist sells 200 pounds, another 140 pounds a year of solid opium, besides five or six gallons of laudanum, and five or six gallons of "Godfrey's Elixir" (a pint of laudanum in every three gallons) a week. People will be startled to hear of drawers full of half-drachm packets of opium, of which many customers take three a day. A farmer came in to get some good laudanum. "How many drops?" asked the chemist. "Drops?" was the reply; "give me an ounce and a half." The chemist looked at him, saw he was in the habit of taking it, and gave him the dose. He drank it off, returned twice in the day for the same quantity, and took home a half-pint bottleful with him when he left market. The habit is no new one. The present writer can vouch for its existence in and around Spaulding, and even across in Leicestershire a dozen years ago. The excuses would be obvious—deficient food with the poor, ague and "rheumatiz." needing an anodyne, with others. But it is a growing habit, and Dr. Hawkins speaks very strongly of its pernicious effects in poisoning the blood. To it he attributes the excessive infant mortality in the district, and the "miserable, feeble, brownish-yellowish countenances so striking among many of the inhabitants." In fact, he thinks its effects on the system almost as bad as those of syphilis, and calls for some interference to discourage what is becoming a cause of wide-spread degeneracy in the breed.—*Imperial Review.*

MULTIPLICITY OF CHINESE REMEDIES.—The great strength of Chinese medicine lies in the multitude of their remedies. Their materia-medica is as large as ours. It consists of a vast accumulation of materials that, age after age, empirics have said were good for this and good for that. Of such facts their books consist. They are characterized by a vast predominance of vegetable matters. As a science they know nothing of botany; but as far as acquaintance with the characteristics of the plants goes, their growth, and properties when used as medicines, they are exceedingly well versed. I might say with safety, that every plant that grows in China has been studied with a view to its medicinal qualities, and, no doubt, they are in possession of valuable facts that will in time be made useful in other countries; and I might say also, that they are about as successful in the treatment of diseases as physicians in other countries. Next to vegetable remedies are animal products in their practice. Some of them are exceedingly disgusting in their application to the human system. The more outlandish the animal the better is the medicine. The medicine taken from a shark, for instance, is considered more powerful than that obtained from a better disposed fish; and the blood of a lion or tiger is more cheerful as a medicine than the blood of less ferocious animals. The blood of a tiger would be given to a man who needed a little more of the tiger in his composition; and the blood of a lion would be given to one who needed a general rousing up of his powers. A class of medicines which we have not touched as yet, is the poisonous substances of animals and insects. They do not know how to extract the poisons, but they cut off the stinging portions of insects, scorpions, and such like, which are prized very highly, and apply them in various ways. Some of them prove very powerful and prompt in their action. They do not deal very extensively in mineral substances, arguing that as but few of the mineral substances are embraced in the human organization, it would not be proper to infuse such substances into the system. Mercury and iron are about the only minerals they use, which they employ in various forms,

mercury extensively, in something like our blue pill, and some resembling calomel.—Dr. Wiley, *Cinn. Lancet and Observer.*

Hudson County, N. J., Medical Society.—This Society held its regular monthly meeting on Oct. 1st, nine of the members being present.

The committee appointed at the last meeting to examine and report upon existing laws of the State with reference to the practice of medicine, made their report recommending that the subject be urged upon the attention of the State Society at its next annual meeting.

Dr. Culver related the history of a singular and fatal case of choleraic dysentery, supposed to have originated from the noxious gases generated by an animal in a state of decomposition. Dr. Varick reported a very rare case of complete lateral dislocation of the elbow-joint. Dr. Chabert exhibited a specimen of tænia lata eleven feet in length, entire, expelled from a patient by the use of three capsules of Dipple's animal oil.

The Salt Springs of New York produce nearly 7,000,000 bushels of salt per year.

Cinnabar in California.—An exceedingly rich bed of cinnabar has been discovered about four miles south of San Jose, Cal. There is a solid ledge about twelve feet wide and eight feet thick, between walls of rock, which grows richer as the excavation proceeds.

The so-called Natural Soap of Missouri.—Natural soap, it is again announced, has been discovered in Missouri, some sixty miles from St. Louis. What has been really found is probably "fuller's earth," a variety of clay which, from its unctuous touch, might easily be mistaken for soap.

The Dangers of Boat Racing.—The *Lancet* thus speaks of "The Dangers of Boat Racing": Few laymen have the slightest idea of the dangers to which a supreme physical struggle, like the finish of a University boat-race, subjects organisms * * * * * * * We sincerely trust that the fine young fellows, whose exertions at the race have incidentally occasioned our remarks, will sustain no lasting harm from their efforts; but we think it our duty to inform them, and the whole race of crack oarsmen, of the almost inevitable consequences which would arise from even a few repetitions of such a performance. It unfortunately happens that the experience of medical men in this matter has never been published in a complete and compendious form; but there are few London physicians who have not met with lamentable illustrations of the mischief done in this way. The tremendous respiratory efforts which a fatigued man must make when he puts on such a series of spurts as those which Cambridge made, very often produce rupture of the air-cells of the lung, and a dangerous permanent emphysema. The furious action of the heart *may* cause rupture of a valve, and very frequently *does* cause cardiac dilatation, with or without hypertrophy, and lastly, the enormous blood pressure in the vessels is not uncommonly the cause of aneurism. Exact statistics are wanting on the subject of these maladies as thus produced, nor can we say accurately to what extent they shorten life; but it is certain that men who have committed great excesses in taxing their powers by boat-racing when young, frequently do not survive to old age. We have known of several deaths from fatty and dilated heart, quite in early middle life, which were directly traceable to this cause. The dangers incidental to the process of training, and the climax for which it is the preparation, are best avoided by the selection of men of sound *physique*, by a gradual education for the contest, and by the avoidance of an abrupt subsequent transition to ordinary habits of life.

The Humboldt Medical Archives.—The first number comes to us in a very creditable shape, and contains original communications, an interesting lecture by Prof. Hammer, editorials and news. It is under the editorial charge of Drs. A. Hammer and M. A. Pallen, they having for co-editors the faculty of the Humboldt Medical College, St. Louis. Although emanating from the said college, the intention is to make it cosmopolitan, but this is not made as apparent as it might be if an elaborately written editorial notice of the advantages of the institution were omitted.

Work on Military Surgery.—The *Gazette Médicale*, of Paris, speaks well of a work called "Military Surgery in France and America," by M. Goze, and which, it seems, exhibits a comparison very favorable to the American military surgical appliances, and of the sanitary department generally of the U. S. government.

American Ambulances.—The Paris correspondent of the *London Medical Times and Gazette*, and also that of the *Illustrated News*, calls the American ambulances the best in the Exhibition, and the one exhibited by Dr. Benjamin Howard, of New York, the most perfect of them all. The "Times and Gazette" correspondent, deems it a matter of regret that Dr. Howard's ambulance was not known until nearly the close of the war.

A Medical Cannibal.—The *Liverpool Post*, of the 16th Sept., announces the extraordinary fact of a medical assistant actually cooking and dining off of a corpse. This disgusting affair took place at St. Thomas's Hospital, London. As a just punishment for such an outrage upon common decency, the medical authorities have publicly dismissed the would-be cannibal in disgrace.

Another Death from Chloroform.—Deaths from chloroform are now getting to be so common that it requires a faithful chronicler to keep track of them. The present case occurred (so says the *Liverpool Post*) at the Northern Hospital, Liverpool, on the 11th of Sept. The operation to be performed was that of straightening an anchylosed knee, the result of a fracture received some time previously. The junior house-surgeon (Mr. Trubshaw) administered chloroform by means of Skinner's inhaler, using about four or five drachms, and thinking that the deceased would not inhale more than half that quantity. Deceased exhibited alarming symptoms towards the close of the operation, and artificial means were employed to sustain respiration, but he expired shortly afterwards. The chloroform, it appeared from the evidence, was carefully administered, and every precaution used to prevent misadventure. A post-mortem examination of the body was made by Dr. Wollaston, senior house-surgeon at the hospital, and his opinion was that death resulted from syncope induced by chloroform. He added that the medical gentlemen present at the operation were satisfied with the manner in which the chloroform had been administered. Verdict, "Died from misadventure, from the administration of chloroform, during an operation." The jury added, that no blame was attachable to any of the medical gentlemen, and that the chloroform had been administered with caution. The patient was fifteen years of age.

A Permanent Anæsthetic Wanted.—A reward of $10,000 has been offered by an English gentleman, through the chairman of the London Hospital, to any person who shall have discovered by July 1, 1868, any means by which in all, or nearly all cases, pain can be both

permanently and completely extinguished, as it can now be extinguished for a short time.

Longevity of Brain Workers.—Reasoning from analogy and from the facts of biography, it would seem that those who are endowed with unusual intellectual powers can work harder and longer, all things being equal, than the rank and file of humanity. The law is that great intellects are incased in sturdy, powerful frames, and the occasional existence of monstrosities serves but to establish the rule. The number of really great men of history is comparatively so small that it is impossible to fully substantiate this theory by statistical facts, but if we take the record of biography from the earliest time to the present as our guide, it would seem to be very clear that intellectual giants are capable of undergoing severer brain labor, with far better prospects of longevity, than men of mere ordinary ability. I have taken the pains to go through the cyclopædia, and to note down the ages of *one hundred* of the greatest men of history, those who have created epochs, and have been the leaders of the world's thought in literature, art, science, and statesmanship, and I have found that the average age of these was much higher than that of literary and professional men generally; nay, even much higher than that of clergymen, the longest livers of all. This list, which covers a period of many centuries, contains such names as Goethe, Coleridge, Lessing, Beranger, Wordsworth, Voltaire, Hume, Milton, Shakespeare, Dante, and Irving, among men of letters; Raphael, Michael Angelo, and Reynolds, among painters; Malebranche, Locke, Leibnitz, Kant, Hobbes, and Hamilton, among modern philosophers; and Socrates, Aristotle, Plato, Cicero, among the ancients; Harvey, Cuvier, Buffon, Galileo, Humboldt, Newton, Jenner, and Faraday, among men of science; Napoleon, Marlborough, Washington, Metternich, Richelieu, Burke, Webster, Calhoun, and Clay, among warriors and statesmen; and Calvin, Luther, Knox, Butler, Paley, and Edwards, among theologians. No one will deny that these and similar names fairly represent the giants of history.—*Geo. M. Beard, M.D., in "Hours at Home."*

Death from Chlorodyne.—On Saturday last considerable excitement was created in the town of Harleston by the report that a woman named Elizabeth Saunders had been poisoned by chlorodyne. The deceased has for several years been in the employ of Mr. Thomas S. Stanton, of Mendham, who supplied this town with milk. While on her round with the milk on Saturday morning, she called on Mrs. Arnold, and as she complained to her that she was suffering from diarrhœa, Mrs. Arnold gave her a dose of chlorodyne, which had as she thought been prepared for her son, but which it turned out was undiluted. On discovering her mistake, Mrs. Arnold sent for Saunders, and gave her some antimony as an antidote. She was, however, left to go on her way, and not returning home at her usual time, inquiry was made for her, and she was found, between 10 and 11 o'clock, in a water-closet in the town, in a state of unconsciousness. Medical attendance was called in, and every attention was shown her, but she never rallied, and only lingered till 10 o'clock at night. An inquest was held on Monday morning, when a verdict of "Accidental death from an overdose of chlorodyne" was returned.—*London News.*

Extensive Examination of the Eyes.—A curious work has been published at Breslau lately by Dr. Hermann Cohn, giving the result of an examination of the eyes of 10,060 school children. The proportion of short-sighted children was 17·1 per cent., or 1,730 among 10,060. No village children were found to be short-sighted until they had been some time at school—at least half a year. Dr. Cohn attributes the evil in a great measure to the bad construction of school benches, which force the children to read with their books close before their eyes and with their heads held downwards. The obstinate adherence to the ancient Gothic character in printing and writing, to which Englishmen are generally inclined to attribute the prevailing near-sightedness of Germans, is not alluded to by Dr. Cohn.

Suicides in England.—The Registrar-General has published a curious return of the number of suicides in England during the eight years from 1858 to 1865. They average 1,300 annually, and to every million of the population run thus in each successive year: 66, 64, 70, 68, 65, 66, 64 and 67. Hanging has always been the death generally adopted by suicides, 28 out of the ratio of 67 per million suicides falling under this head. After hanging follow cutting, stabbing or drowning, poisoning, and by firearms. The ratio of suicides per million of the respective populations in 1864, was 110 in France, 64 in England, 45 in Belgium, 30 in Italy, and 15 in Spain.

The Washington University—A New School of Medicine.—A new medical institution under the above name, having a corps of professors second, perhaps, to that of no other institution in the country, is about being established in Baltimore, under auspices which lead to the assurance of its permanent success. There is no doubt that Baltimore, regarded as a favorable point for education generally, may find abundant support for more than one medical school, and with that idea this project has been commenced.

The regular sessions of Washington University will begin annually on the first Tuesday in October, and continue for five months. A summer course of lectures, beginning on the first Monday in April and concluding on the last day of July of each year, will be delivered by the adjunct faculty. The faculty consists of the following professors: Rev. Thomas E. Bond, M.D., President; G. C. M. Roberts, M.D., Emeritus Professor of Obstetrics, and Diseases of Women and Children; C. L. Ford, M.D., Professor of Descriptive and Surgical Anatomy; J. P. Logan, M.D., Professor of the Principles and Practice of Medicine; Harvey L. Byrd, M.D., Professor of Obstetrics; Martin P. Scott, M.D., Professor of the Diseases of Women and Children; Edward Warren, M.D., Professor of the Principles and Practice of Surgery; John F. Monmonier, M.D., Professor of Physiology and General Pathology; J. J. Moorman, M.D., Professor of Medical Jurisprudence and Hygiene; Joseph E. Clagett, M.D., Professor of Materia Medica and Therapeutics; Clarence Morfit, M.D., Professor of Medical Chemistry and Pharmacy; John N. Monnomier, M.D., Demonstrator of Anatomy.

The faculty have obtained an eligible location for the holding of lectures and cliniques in the large building corner of Calvett and Saratoga streets, where, during the session, daily classes will be held. It is intended by the faculty to obtain a permanent location at an early day. Added to the University is a free dispensary, recently opened at the University building, at which all persons desiring medicine or surgical attention are treated daily, between the hours of 12 M. and 1 P.M. During these hours both professional services and medicines are furnished gratuitously. The following are the surgeons and physicians of the dispensary: Surgeons—Profs. Edward Warren and C. L. Ford. Physicians—Profs. Joseph P. Logan, Harvey L. Byrd, John F. Monnomier, Joseph E. Clagett, and Martin P. Scott.

Original Communications.

CASES OF
REFLEX AND ORGANIC PARALYSIS TREATED BY ELECTRICITY.

By A. D. ROCKWELL, M. D.,
AND
GEORGE M. BEARD, M.D.,
LECTURERS ON NERVOUS DISEASES IN THE UNIVERSITY MEDICAL COLLEGE OF NEW YORK.

FACIAL PARALYSIS TREATED BY THE GALVANIC CURRENT.

CASE I.—Miss P., a stout, vigorous young lady of fifteen, was sent to us by Dr. F. Elliott to be treated for paralysis of the seventh pair, on the left side, caused by exposure to a draught of air two months previous. The paralytic symptoms came on suddenly and in full force immediately after the exposure, and at first she experienced considerable difficulty in speaking.

She gradually became so accustomed to the abnormal condition of her lips and face that she was able to converse almost as clearly as before; but the improvement in the condition of the paralyzed muscles was very slow, and at the time she came to us the affection appeared to be almost stationary. At the time she received the first application at our hands (Aug. 1, 1862), she presented most of the usual symptoms of paralysis of the seventh pair.

Her mouth was drawn over towards the healthy side so violently as to produce considerable deformity when she laughed or conversed, and even when she smiled. When she attempted to frown, the left brow remained as smooth as that of a child.

Her left eye rolled up, and when she attempted to close it, the lids would not approach nearer than one-quarter of an inch to each other. A powerful Faradaic current, localized in the affected muscles, produced very feeble or imperfect contractions; while on the sound side, a very mild current applied with the hand, produced active contractions of all the principal muscles. The patient was so well in all other respects, that we decided to use only partial or localized electrization over all the muscles on the left side of the face. Two vigorous applications made in this way, one electrode being placed firmly below the ear, and the other passed over the ramifications of the seventh pair as well as over the individual muscles, did not seem to increase to any appreciable extent the electro-muscular contractility, and accordingly we resolved to adopt an entirely different method of warfare.

The next time we localized the galvanic stream through the left side of the face, and with most charming results. Contractions of the paralyzed muscles were at once produced that were as vigorous and as natural as those caused by the Faradaic current on the healthy side.

The patient began at once to improve, and after ten visits, distributed over a period of six weeks, she was dismissed as approximately cured. There still remained some deficiency of action of the muscles concerned in frowning and in winking, but the expression of her face, both in repose and in conversation, was normal. The very little that remains, nature ought to accomplish unaided. The interesting points are as follows:

First.—*The galvanic current produced contractions, and wrought a cure, when the induced or Faradaic utterly failed.* This important fact with regard to the galvanic current, viz., its power of causing contractions in paralyzed muscles that do not appear to be affected by the Faradaic was first pointed out by the late Prof. Remak, of Berlin, whose original and able researches in electro-therapeutics* really made him the father of a distinct school of electricians in Germany, as Duchenne has long been in France. Though the ideas advanced by Remak were at first scouted and despised by the profession, as, indeed, has ever been the case with all original suggestions in science, and although his own impetuosity and extravagance hurried him into generalizations that could not have stood the test of investigation, yet his leading idea in regard to the superiority of the galvanic over the Faradaic current, in some forms of paralysis, is now as fully established as any fact of science among those who are practically familiar with electro-therapeutics.

These observations of Remak have recently been confirmed in a very striking manner by Prof. Ziemssen,† of Berlin, by Schulz, Meyer,‡ Baierlacher, Neumann, and Hammond. As a rule, the benefit received in such cases is proportioned to the extent of the muscular contractions that can be produced. The current, either the Faradaic or the galvanic, acts as a *local tonic*, bringing into action the diseased muscular fibres, increasing the local processes of waste and repair, improving the circulation, and consequently making the parts permanently warmer and stronger. These results we have observed very markedly in a number of cases of infantile paralysis, under the influence of general electrization with the Faradaic current.

Second.—The paralyzed muscles were at first brought to contraction by a galvanic stream of small quantity, but of considerable intensity, *that had no effect whatever on the muscles of the healthy side.* As the patient improved, however, it became necessary to use a stronger galvanic stream in order to produce the contractions. Towards the close of the treatment, the muscles of the paralyzed side began to respond to the Faradaic current. These apparent inconsistencies had also been previously observed by a number of the German electricians already mentioned. The late P. Victor Bazire§ has recorded an experience almost precisely similar. It does not follow from these facts that the relative value of the two currents is entirely undecided. On the other hand, it may well be questioned whether we do not know nearly as much of the indications of their use and the rationale of the operation of their currents, as of any of the internal remedies that are styled specifics. In general electrization for the purpose of producing a constitutional tonic influence, in partial electrization with a view to calmative or absorbent effects, and for most cases of localized electrization, we use the Faradaic current.

On the other hand, for those exceptional cases of paralysis where the Faradaic current will not produce contractions, and also when it is desired to affect the retina, we use the galvanic.‖

Third.—Although the galvanic current applied to the face caused intense flashes of light, affecting the retina by reflex action, as is always the case when it touches any part supplied by the fifth pair, it yet was in no way injurious to the eye.

Long ago, Duchenne recorded a case of permanent blindness resulting from over-excitation of the retina through a strong galvanic stream applied to the face. The patient reported that the whole room seemed to be in a blaze, and immediately afterwards she became blind on the side to which the current had been ap-

* Ueber Method. Electrisirung Gelähmter Muskeln. Berlin, 1855.
† Die Electricät in der Medicin. Berlin, 1866.
‡ Die Electricät in ihrer Anwendung auf Prac. Med. Berlin. 1861.
§ Notes to Translation of Trousseau's Lectures on Clinical Medicine, Part II., p. 381.
‖ The galvanic stream appears in some instances to cause absorption more rapidly than the Faradaic. For its use in the form of galvano-cautery, *vide* Althaus on Tumors and other Surgical Diseases. London, 1861.

plied. This sad experience of Duchenne has had the effect of deterring the electricians of France, England, and America, from using the galvanic stream of any strength to the parts supplied by the fifth pair. But, with all deference to those who differ from us, we cannot regard this fear as well grounded. One case, if anything, proves but little in science, and there is at least reason for suspecting that the unfortunate patient of Duchenne was at the time affected by some weakness of the retina or other parts of the eye that prepared her for the final catastrophe.

Certain it is that the accident has never been repeated, so far as we know, by any of the recent experimenters in this department. On the other hand, very many of the German electricians use the galvanic stream, oftentimes from a large number of elements, in various affections of the face, and without injury. For ourselves, we never hesitate to employ the galvanic current of any strength so long as benefit may be received. More than that, we have tested the stream from a large number of elements, on our own faces, in order to experience its physiological effects on the salivary secretion, sense of taste, and always without injury. It may, indeed, cause a slight headache, dizziness, or drowsiness; but so may the Faradaic current, when used in excess or without proper caution. But facial paralysis may often be relieved by the Faradaic current alone.

PARTIAL PARALYSIS OF THE RIGHT SIDE OF THE FACE, WITH CONTRACTION OF MUSCLES, FOLLOWING NEURALGIA.

CASE II.—Miss J., aged forty, came to us in the early part of September of the present year, to be treated for a facial paralysis of a peculiar character. Her face was drawn to the right side, so that her features were very much distorted. We at first supposed, and very naturally, that the case was one of paralysis of the seventh pair of the left side, but a more careful examination led us to modify our diagnosis.

Her history was as follows: Several years previous, while occupied in day and night attendance at the bedside of a sick friend, she was suddenly attacked with severe facial neuralgia of the right side, that continued to annoy her for two months. The disease then abated, but since that time she has been frequently harassed by persistent numbness in the right arm and hand.

On localizing a strong Faradaic current through the muscles of the *left* side of the face, powerful contractions were excited. On the *right* side no such effect could be produced.

Furthermore, her right eye was nearly closed, owing to a partial ptosis, and while she could easily frown and corrugate the left brow, the right was entirely smooth and expressionless. It was very evident, both from the history of the case and from symptoms at the time, that the *right* side was paralyzed, and not the left, as at first appeared, and that the face was drawn towards the right by the contractions of the *muscles following the paralysis.*

The lamented Trousseau, whose lectures on clinical medicine are unrivalled, not only for their originality and suggestiveness, but also for clearness and fairness of statement, as well as for elegance and beauty of style, has described this condition so accurately that we quote his own language as it appears in the translation of Bazire.*

After relating the symptoms of a patient suffering from paralysis, he says: "If left facial paralysis was thought of at first sight, the depression of the lower lid, and the less marked expansion of the nostril on the right side, were already sufficient to cause a modification of the diagnosis. But when the patient attempted to move that side of her face there could no longer be any hesitation, and it became manifest that it was the right side which was affected. When she spoke, and still more when she laughed, her face was pulled with force to the left, the upper lip and the ala nasi on that side going obliquely upwards, and the labial commissure being drawn with considerable energy upwards and outwards. When she attempted to blow, her left cheek swelled, and her mouth remained closed on that side, whilst her right cheek was flaccid and her mouth opened out a little on that side. Besides, she could not shut her right eye, however much she tried." . . . . . .

In this case we used only the Faradaic current, localizing the electricity as nearly as possible along the course of the portio dura and its ramifications. To accomplish this the small positive electrode was pressed firmly under the right auricle, near the point where the nerve emerges from the temporal bone, while the negative was moved along its various terminal branches.

No particular results were obtained from the first application, but during the second visit slight contractions were produced on the right side, and it was then noticed that the eyelid did not fall so low as before.

In the course of a few days the patient again visited us, when the improvement was quite marked. There was considerable relaxation of the contracted muscles, and the electro-muscular contractility was readily demonstrated. At the fourth visit, which occurred about two weeks from the commencement of treatment, the ptosis was hardly noticeable, and the power of corrugating the occipito-frontalis on the right side was perfect. There still remained, however, some distortion of the features, owing to the obstinate nature of the muscular contractions, and, although she subsequently received quite a number of applications, the contraction was not so entirely dissipated as were all the other symptoms. But the amelioration was so complete that the distortion was little noticed, and ceased to give her any considerable annoyance.

CASE III., in its manifestations, was similar to the first case, not only as to its causation, but also in many of its symptoms. Its principal interest is derived from the fact that the Faradaic current caused contractions of considerable power in the muscles of the affected side, while in the other case the galvanic stream alone caused the muscles to respond to any extent. We made use of the Faradaic current on four different occasions, with the effect of benefiting the paralysis and markedly lessening the consequent distortion of the features.

About this time (three months previous to the date of this article) she was confined, and, as her home is some distance from the city, we have not seen her since. By direct information, however, we learn that her paralysis remains the same as when we last saw her. There is every reason to believe that an approximate cure would be effected by a few more applications.

CASE IV.—Mr. M. was brought to us by Dr. Cockroft to be treated for paralysis of both sides of face. In the month of March, 1862, during the retreat of the Confederate army from Kentucky, this gentleman, after prolonged exposure to cold and wet, was attacked with facial neuralgia. Previously he had been so unfortunate as to contract syphilis, which had passed into the secondary stage; but for several years he had been, to all appearances, entirely free from the disease. This attack of neuralgia was followed by partial paralysis of the right side of the face. The neuralgia persisted until July, but the paralysis has continued constant until the present time. In January, 1866, he had a renewal of the neuralgia, which this time attacked the left side of the face. It was of an intermittent type, and on the 25th of March, without a premonitory symp-

* Lectures on Clinical Medicine, Part II., p. 328.

tom, and when he was entirely free from pain, the left side of the face became completely paralyzed. He gradually lost the sense of hearing, and in two weeks was absolutely deaf. When brought to us for treatment he was suffering from paralysis of the whole face.

He was unable to close either eyelid, could neither elevate the eyebrows nor frown. He had but little control over the mouth, and, as a consequence, his speech was very imperfect. "The motionless face assumed a peculiar aspect, and looked like a lifeless mask, on which the impressions of the soul were no longer expressed but by changes of color." We had but little hope of benefiting him, nor were we disappointed; for after a month of faithful and hopeful perseverance on the part of the patient, not the slightest improvement was observed. For a little time after an application he seemed to possess more control over the muscles of the eye and mouth, and his articulation was evidently more distinct. Dr. Devaine gives, after Marshall Hall, the following test, by which it may be ascertained whether the cause of double facial paralysis is seated in the brain or in the course of the nerves: In the former case the conducting power of the nerve-trunks is retained for an indefinite period, so that by galvanizing the trunk and the principal branches of the facial nerves, all the muscles supplied by them are thrown into contraction, as if the muscles themselves are being galvanized, whilst, when the paralyzing cause is in the course of the nerves, they very easily lose their conducting power.

Moreover, if reflex movements be seen in the paralyzed muscles, it will be a sure evidence that the cause of the paralysis is in the nerve centres.

If the above test can be relied upon, and we are inclined to think that experience will prove it to be of great value, the seat of the trouble in the case under consideration was evidently in the course of the nerves. The strongest current that we were able to induce caused no contraction of any of the muscles of the face, and reflex movement was entirely absent. We had no opportunity to use the galvanic stream, much to our regret, since the case first related in this article proves that it is often of service when the Faradaic current is useless.

In this connection it may be proper to say a word in regard to the general indications that call for electrization in the various forms of paralysis.

It seems all the more important that we should make this explanation, from the fact that physicians who in many particulars are well informed and even advanced, appear to forget that paralysis is merely a *symptom* of some disturbance in the central nerve system or at some point of the nervous connection.

It needs then no demonstration to show that the curability of any given case of paralysis, whether it be hemiplegia, paraplegia, or facial, must depend on the cause. According to our experience with electrization in paralysis, the following points seem to be pretty clearly established:

1st. In hemiplegia, paraplegia, and glosso-laryngeal* paralysis (glosso-pharyngo-labialist), dependent on persistent, irritating, central lesions, such as softening of the brain, active tumors, local injuries, and the like, electrization in any form is sometimes contraindicated, or at least is of no positive value. It has been observed that patients affected with softening of the brain are very apt to suffer for a time after an application with a kind of quivering or tremor that is almost diagnostic.‡

2d. In paralysis dependent on lesions that are not persistent, either galvanization or Faradaization are usually of great benefit, and even though absolute cures are not always obtained, yet the process of fatty degeneration of the muscles may often be retarded and arrested, and in the majority of cases the power of motion and tactile sense can be greatly increased. These pleasant results are very markedly observed after persevering electrization of cases of *infantile* paralysis. But in all that we attempt for such long-standing affections of the nerve centres, we should ever keep in mind the emphatic words of Trousseau: "Chronic diseases demand chronic treatment."

3d. Paralyses that are not dependent on any form of central lesion, such as are variously termed reflex, peripheral, functional, anemic, or hysterical; also those of a traumatic origin, or those which are due to exposure to cold, *recent* cases of lead palsy, and the mysterious affection termed "writers' cramp," are very often absolutely and permanently curable by judicious, practical, and continuous electrization.

More than this, such cases, if taken early, are sometimes cured or relieved as promptly and as rapidly as any other class of affections with which we have to do. The conviction is every week being more and more forced upon us that, were such kind of paralytics submitted to proper electrization *at once* after the symptoms appear, the number of cripples would be greatly diminished.

In the course of these articles we shall present cases illustrative of nearly all these different types of paralysis, and shall detail the method, and results of treatment by Galvanization and Faradaization in these three classes: *First*, those that received no benefit whatever, or in which electrization was contraindicated. *Secondly*, those that were temporarily or permanently benefited. *Thirdly*, those that were absolutely or permanently cured.

But although this series of articles is to be mainly occupied with paralytic symptoms, we shall be very sorry to give the impression that paralysis is the only or, indeed, the most important affection for which electrization is indicated. In conversation with our friends in the profession the inquiry is continually made as to what we can do for paralysis; but great surprise is expressed when we reply that our most interesting and most uniform successes are with an entirely different class of nervous affections, and even with inflammatory states.

We cannot therefore too often repeat, in all our writings and teachings, that general electrization with the Faradaic current, using the hand as an electrode, is a tonic of wide and varied efficacy, and meets with the most constant and permanent success (though of course with many failures) in cases of rheumatism, neuralgia, dyspepsia, chorea, dysmenorrhœa, amenorrhœa, and other affections associated with general debility that for some cause refuse to yield to ordinary remedies.

Localized electrization, such as has been universally adopted by the European electricians, has indeed been essayed in a number of diseases, but is chiefly indicated in, and is now used by, all advanced students of nervous diseases, for the different forms of paralysis. On the other hand, *general electrization*, which is the method that we have introduced to the profession, differs from this as widely in its indications and effects as it does in the rationale of its performance.

It is not electricity in the abstract, but electrization in the concrete that cures diseases. The effects of electricity on the human body depend entirely on the manner in which it is generated and the method by which it is employed, and no observation in electro-therapeutics is worth anything that does not express distinctly whether the galvanic or Faradaic currents are used, and whether the electrization be localized, partial, or general.

* Trousseau's Lectures on Clinical Medicine.
† Die Elektrotheraple. Dr. Moriz Rosenthal.
‡ Under this clause may properly be indicated "Progressive Locomotor ataxia;" perhaps also the "senile trembling" of Trousseau.

RUPTURE OF THE HEART.

BEING REMARKS MADE AT A MEETING OF THE PATHOLOGICAL SOCIETY, OCTOBER 9, 1867.

By W. B. LEWIS, M.D.,

NEW YORK.

On the 9th of October, at the request of a member, I presented to the N. Y. Pathological Society the heart of a physician of this city who died in his sixtieth year, after an illness of about ten hours, of rupture consequent upon fatty degeneration of the heart.

On the Saturday previous the doctor was in his usual health. On Sunday morning he arose, but having a headache and feeling out of sorts, went back to bed. During the day, which was passed quietly, he took some light food, and at tea-time joined the family and seemed much better. About nine P.M., while writing some letters, he was seized with a severe pain in the stomach. It passed off in a few minutes, so that he wrote again, but it soon returned, and was then felt in the back also, between the shoulders. The agony became intense, and was not relieved, although fomentations and sinapisms were applied, and opium and chloroform were taken internally. He was sure he had stricture of the stomach, and to overcome this would rise from the bed and provoke vomiting by drinking warm water freely, and then lie down and strain like a woman in labor. Although he was fully conscious of the influence of the medicines taken, the pain continued without abatement until an early hour in the morning, when he slept for a few minutes while sitting in a warm bath. About half-past seven A.M. he arose and renewed his efforts to remove the difficulty by vomiting. To accomplish this he passed his fingers as far as possible into his throat, and strained frightfully. As soon as he was again upon the bed he said, "Something has given way; there will be a change soon." He died a few minutes after this, breathing most quietly to the last.

Several times since last January he had suffered in a similar manner, but less severely and for a shorter period, and on each occasion had gradually found relief.

The post-mortem examination was made early on Wednesday morning. The body was then very thoroughly chilled and stiffened by the ice with which it had been surrounded. The subcutaneous layer of adipose was more than an inch in thickness, and that beneath the peritoneum more than one-quarter of an inch. The lungs appeared normal. A quantity of blood-stained serum escaped from a wound in the pericardium, produced while removing the sternum. The abdominal organs, except a small portion of the liver, were hidden beneath a mass of fat. The great omentum was strangely loaded, being not less than an inch and a half thick at its junction with the transverse colon. The stomach was entirely normal, presenting no thickening or other change at any part of its walls, except that in the fundus there was a slight blackish stain upon the mucous membrane. It contained about an ounce of a thick, greenish fluid, such as is found during the later stages of digestion. The liver was engorged with blood, and evidently fatty; the mottling produced by intra-lobular congestion being quite marked. The gall-bladder was full of bile, a little thinner and lighter in color than usual; no concretion was found in it or its duct. Upon slitting up the pericardium an irregular laceration of the walls of the heart, three-fourths of an inch long, was at once noticed, situated about midway, from above downwards, and a little to the left of the inter-ventricular septum. The visceral pericardium, however, was torn only at two points, the larger of which would admit the end of a large-sized probe. Placing the finger upon this portion it could be easily depressed, showing that the walls were very thin and much softened beneath. The pericardium contained some loosely clotted, dark blood, not having the arterial hue, nor by any means forming a cast of the sac.

Upon opening the right ventricle it was found firmly contracted. No lesion of either valves or cavities was found upon this side. On the left side, in the sinuses of the semilunar valves, were whitish, slightly elevated spots of atheroma in an early stage. Near the apex of the ventricle, anteriorly and to the right, was an extensive *transverse* laceration, rather more than an inch in length, the columnæ appearing discolored and ragged upon its edges. The new cavity thus produced was evidently not made at one time, as it connected with at least two sinuses which could be traced upwards towards the base of the organ beneath the pericardium and fat. One of these opened into the right ventricle through one of the venæ thebesii, near the origin of the pulmonary artery, and upon the right surface of the septum. A peculiarity of this rent was that it was of the transverse variety, which numbers about one-fourth of the recorded cases, the majority being parallel with the fibres of the heart. There were two other partial ruptures, one to the left, and another below this fatal one; it seemed that either of these might in time have caused death. The tissue of the organ was of a duller shade than is normal, and remarkably friable, more so than the liver in this case.

A small portion clipped from the neighborhood of one of these partial ruptures was examined microscopically. Much the greater number of the fibres were granular, semi-opaque, and either devoid of, or but faintly showing their striæ; some had a column of more or less irregular fat globules occupying their centres; some, though few, were transparent, and presented the striæ clearly. Numerous free oil globules of various sizes were seen floating in the field. The granular particles were not resolved into globules by a power of five hundred diameters, although it was supposed that such was their real form.

Allow me to call attention to the location of the greatest and most constant pain in the *epigastrium*. This obscured the diagnosis, and has remained in a measure unexplained, to some at least, by the autopsy. I have recently learned of a similar case in which, after a few hours of great agony, also referred to the epigastrium, and thought to be due to biliary calculus, the patient died of rupture of the left ventricle of the heart.

LIGATION OF THE SUBCLAVIAN ARTERY FOR ANEURISM OF THE HUMERAL AND BONY TUMOR.

By E. P. BENNETT, M.D.,

DANBURY, CT.

Ligation of this artery is not so rare or so difficult as to excite any particular interest, but there were some circumstances attending this case which, perhaps, make it worth recording. The patient was a hatter, of good habits and constitution, about thirty years of age. Some two or three years ago he perceived a small tumor on the inner side of the humerus, near the axilla. It increased slowly in size until about the first of July, when he requested my opinion in regard to its nature and treatment. Upon examination I found a rough, sharp tumor, in shape like a cock's comb, about two inches long, and three-fourths of an inch wide. As it

produced but little inconvenience, I advised him to let it remain and watch its progress. He returned in about a week, and said that while engaged in moving, the tumor had suddenly increased in size, and was exceedingly painful. Upon examination I could with difficulty feel the bony projection, as it was covered and obscured by a large pulsating tumor the size of a large orange. There was a brachial aneurism situated near the axilla, the artery having probably ulcerated from the pressure of the bony projection. I immediately, with the aid of my son, Dr. W. C. Bennett, and Dr. A. C. Benedict, of Bethel, proceeded to tie the subclavian after its passage through the scaleni. The pulsation, which before was excessive, immediately ceased after tightening the ligature, and never returned; the tumor soon becoming soft and flaccid. The ligature came away on the twenty-fourth day, and he has done remarkably well. He has now returned to his ordinary labor, that of a hat-finisher, and is able to perform an ordinary day's labor; the temperature of the arm is natural, but no pulsation has yet returned in either of the arteries at the wrist. More than this, as yet no increase of the bony tumor has occurred. Sufficient time, however, has not yet elapsed to ascertain definitely what effect the ligation of the artery will have upon its growth. If it continues to grow, I shall cut down upon and remove it with a longitudinal portion of the shaft of the bone from which it proceeds, which will, in all probability, entirely eradicate the difficulty. I removed a similar tumor from the arm of a gentleman now living in Middletown, N. Y., with gouge and chisel, taking away about half of the bone, with entire success.

Reports of Hospitals.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF PENNSYLVANIA.

MEDICAL CLINIC OF PROF. CARSON.

Philadelphia, Oct. 16, 1867.

FLATULENCY.—The patient, a married female, about thirty years of age, has been subject to flatulency for a period of fifteen years. The character of the complaint in the patient is the emission of wind, or of certain gases from the stomach, sufficiently loud to drown the lecturer's voice, these emissions occurring about every half minute. She has no feeling of discomfort, although she does not feel so well in the evening as in the afternoon. Has no difficulty in breathing, does not suffer from headache; sometimes feels an oppression about the heart; no palpitation in going up stairs; pulse strong and regular, but not rapid—beats eighteen to the quarter; rhythm of the heart perfect; the impulse is very moderate, the two sounds are perfectly perceptible; nothing is the matter then with her heart. There is a perceptible gurgling from her alimentary canal extending all the way up into her thorax. The sounds of respiration are thus rendered indistinct. She became pregnant in the spring, but from derangement of the alimentary canal was unable to go through the full term and miscarried. There is no perturbation of the nervous system.

From a peculiar condition of the alimentary canal in nervous cases, this secretion of air generally comes on all at once, and it is said to be connected with disturbance of the ganglionic system. In some cases irritation about the centre of the spine will induce this secretion of wind, if it is secretion, which the lecturer doubts, because the canal does not secrete gas, the presence of which is much more likely to be due to some decomposition. The manner in which the gas is formed, however, is a disputed point. There is no perceptible odor from this emission, though it may nevertheless be hydrogen gas, which is sometimes generated in the alimentary canal; still, it may be some other matter.

This case appears to be a pure specimen of reflex action, producing a generation of gas in the alimentary canal, come from whatever cause it may. There is a distension of the stomach, and the diaphragm so presses upon it as to bring up the gas by eructation; so that it may be looked upon to a certain extent as nervous. The lecturer said that he had always found it advisable under this condition of things, when there was a tendency to a secretion of gas, if it be secreted, to use the terebinthinates, for example spirits of turpentine, and at the same time to keep the bowels regular and in a soluble condition, for which he found nothing better than a warm cathartic; sometimes asafœtida is of great assistance—it is a nervine. The patient was ordered, upon going to bed, a couple of pills, each containing a grain of rhubarb, a grain of aloes, two grains of powdered asafœtida, a grain of soap, and half a drop of some essential oil; and to take three times during the day five drops of spirits of turpentine in emulsion with gum and sugar.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, OCTOBER 8, 1867.

DR. A. C. POST, CHAIRMAN *pro tem.*

ŒDEMA OF THROAT AND TONSILLAR CONCRETION.

DR. SAYRE exhibited a specimen, and gave the history of it as follows: On Sunday a week ago I was called in great haste to a lady who was supposed to be suffocating with diphtheria. I found the patient, æt. 60, sitting up in bed with all the symptoms of impending suffocation—her expression was anxious, and her respiratory efforts were painfully difficult. Upon examining her throat no evidences of diphtheritic deposit could be discovered, but there was to be seen an œdematous condition of the tonsils, the epiglottis, and of the fossa beside the epiglottis. Fearing, from the urgency of her symptoms, that strangulation might ensue from any delay, I immediately slit open the œdematous membrane with a bistoury, and, in doing so, felt the blade strike upon a roughened hard substance. My first impression was that this material was a piece of oyster-shell. An abundant discharge of thick ropy mucus followed the incision, and there was immediate relief of all the urgent symptoms. By fishing in the throat with a forceps, the foreign body could be distinctly felt, but not having a curve to the instrument to enable a grasp to be taken of it, it was removed by means of a bent probe. On examination it proves to be a concretion evidently formed in one of the follicles of the tonsil. It lay upon the left side of the epiglottis in the fossa between the columns of the tonsil. There was no tonsillitis at the time, but whether there was any before I am not able to say. In answer to some questions from the members he stated that severe dyspnœa had existed for eight hours previous to his having seen her, and that she had been sent down from Yorkville by her physician, who had supposed her suffering from diphtheria. The extent of the incision could not be stated, as, for obvious reasons, it was made in a great hurry. The œdema was mostly upon the left side of the throat.

DR. ROGERS, who kindly examined the concretion,

makes the following report:—The specimen is one whose exterior appearance is very well described by Dr. Gross in his Elements of Pathological Anatomy. When speaking of earthy concretions in the tonsils, he says, "they usually have a white, greyish, or light-brownish color, a spherical figure, and a finely tuberculated surface." I presume these different shades of color result from the different proportions of animal substances composing the concretions. This one is quite dark on account of the large amount of animal substance it contains. It is composed of carbonate of lime mostly, and dissolves in the acids with effervescence, leaving an abundant residuum of dark-brown animal matter, which, upon examination by the microscope, is found to be composed of a mass of ill-defined cells or corpuscles, or both, intermingled with a few pavement epithelial scales. I have little doubt that this animal debris is composed of follicular epithelial scales, altered pus and mucous corpuscles, as well as an occasional pavement scale, from the adjacent mucous membrane. The stone is undoubtedly a concretion in one of the follicles of the tonsils, the result of old folliculitis.

Dr. Jacobi did not understand the connection which existed between the œdema and the presence of the foreign body. He had met with some cases, and read of many more, in which foreign bodies of the same description in the throat produced distressing symptoms, but in none of these was there any œdema of the glottis.

CARIES OF HEAD OF FEMUR WITH EXSECTION.

Dr. Sayre presented a second specimen, consisting of caries of the head of the femur with some portions of the acetabulum, which he removed by excision that day from a child six years of age. Eighteen months ago, having been previously in good health and of healthy parents, the patient fell from a swing some seven or eight feet, striking upon the feet. This accident was followed almost immediately by a sharp inflammation of the hip-joint, resulting at first in considerable lameness. At the end of three or four months afterwards the patient was able to walk about, but never entirely recovered the use of the limb. The child last fall was brought to Dr. Sayre's office, but he being absent from the city the case was treated by other surgeons until he returned. The day but one before he operated. There was such extreme abduction of the thigh of one side that the knee lay behind the lower third of the femur of the opposite side. There was an opening near the posterior spinous process of the ilium, and another just behind and below the trochanter major. On careful examination under chloroform by pressure and rotation no crepitus could be detected. If the evidences of the existence of this condition were the only ones that could settle the question of destructive disease in the joint, the operation would not have been performed; but notwithstanding the absence of this important sign Dr. Sayre concluded from the position of the limb that there was a destruction of the head of the bone.

The incision was, as usual, slightly curved, and the head of the femur was sawn off just below the trochanter. On removing the diseased mass, the head of the femur was entirely gone and its place occupied by a pulpy, elastic, and pinkish looking substance resembling India-rubber in consistence. The child was dressed up in the ordinary way by Bonnet's wire breeches. Although the bone was soft at the point of section the periosteum was intact below, and Dr. Sayre thought that the chances for recovery were good. He recognized the softened condition at the time, but it being the opinion of the gentlemen present that a section at the point would be low enough, he acquiesced and performed the operation accordingly. The treatment by elastic extension had not been tried by the surgeons having previous charge of the case, otherwise the operation in his opinion would doubtless have been uncalled for.

In conclusion, he stated that it had now been nearly two years since he had presented any specimen of exsection of the femur, since which time he had removed three with a good result, and one where death ensued. This made in all twenty-three cases, with only six deaths.

RUPTURE OF THE HEART.

Dr. Lewis presented a specimen of rupture of heart (*vide* page 412).

Dr. Hamilton stated that in 1860 he made an autopsy of a gentleman who died of a rupture of the left ventricle. The patient was sixty years of age, and of a robust constitution. He saw him twenty-four hours before his dissolution, when he was suffering from irregular and feeble action of the heart, and with a pain which he located chiefly in the epigastrium and somewhat upon the left side. The pain was supposed to be due to some disturbance of the stomach of which the action of the heart was merely sympathetic, more especially as he had been accustomed to such attacks previously; in fact, he had suffered from a similar one on the very day Dr. Hamilton first saw him, but not quite so severe as the one referred to. From this last attack he never recovered. A post-mortem examination was made, and, as far as he could remember, the heart seemed to have undergone fatty degeneration. There was a fissure near the apex of the left ventricle. The walls of the heart were very much thinned. The rent was a very small one, and but three ounces of blood were found in the pericardium.

Dr. Eliot, who had attended the medical gentleman whose case was reported by Dr. Lewis, stated that the deceased had repeatedly suffered from similar attacks of pain, which he had been accustomed to refer to stricture of the stomach, and when warned of their appearance would take some blue mass and be relieved. He was also in the habit of inducing emesis by thrusting his finger into his throat, with the idea thereby of relaxing the stricture. So much had he practised this manœuvre that at times he would almost insert his whole hand into his throat. He did not commence to ail until Sunday, when he was compelled to stay in bed until evening, and then arose and wrote a couple of letters. Shortly after this he was taken with the pain, which was so severe that he was forced to brace himself with his back against the door for relief, which, however, did not come, and he then went upstairs to bed. The remaining portion of the history was already known.

POISONING BY LAUDANUM.

Dr. Finnell exhibited the uterus and appendages of a young lady who had been poisoned by an overdose of laudanum. She had eaten a very hearty dinner in the evening about six, and two hours after, while suffering from some pain, it is not known where, she took some laudanum from a bottle which had been standing for a long time without a cork. The quantity taken was not known, neither was the strength of the tincture ascertained. She retired about ten o'clock in a stupid condition, and in the middle of the night her aunt, who was sleeping with her, became alarmed at her heavy snoring, and made some ineffectual efforts to arouse her. The alarm was given, but all endeavors to resuscitate her

were unavailing, and she died at five o'clock the following morning.

The autopsy was made twelve hours after death. The stomach contained part of the meal taken the evening before, and there was a strong odor of laudanum perceptible when the organ was opened. Although the deceased menstruated a week before her death no recent corpus luteum was discovered. The uterus was intensely congested on its internal surface, and the os and cervix were plugged with a thick mucus.

EXTENSIVE EXTRAVASATION OF URINE.

DR. BUCK presented a specimen of a bladder and urethra taken from a man thirty-seven years of age, who was admitted on the afternoon of the Thursday before into St. Luke's Hospital. He was represented to be a hard drinker, and was in a condition verging on collapse from extensive extravasation of urine. The antecedents of his case were very imperfectly related. It was represented that a swelling, to be presently described, had existed for three days. The scrotum was distended almost to the size of a fœtal head, was shining and tense. The penis was swollen and œdematous, not tense, and the pubes was distended, and the flanks above and on a line with Poupart's ligament were very considerably swollen and elevated. This condition was particularly marked on the right side. The surfaces of these swellings were mottled and had a hard appearance, and when pressure was made the patient made decided complaints of pain. Fluctuation could be felt in the right iliac region. The perineum was also distended and tense.

The first step in the performance of an operation for the relief of the patient was the making of a free incision along the raphe of the scrotum for two-thirds of its distance, splitting it to the depth of two inches, and carrying the incision back along perhaps half the extent of the perineum. This passed through infiltrated tissues of a greyish aspect, and the incision far back towards the perineum arrived in a cavity, which was found to spread extensively and give escape to a very fœtid discharge. An incision was also made in the right iliac region over the most prominent portion of the swelling, and from that a very considerable discharge of bloody, watery fluid took place. The tissues exposed by this incision were dark, and evidently in a condition verging on gangrene.

The patient hiccoughed occasionally; his countenance was of an ashy hue, and his whole aspect, as well as condition of pulse, was that of impending collapse. He was also represented to have vomited previously.

No attempt was made to relieve the bladder at that time; in fact, it was thought best not for the present to proceed any further. Every means was used to sustain his strength, and it was hardly suspected that he could survive the night. But next forenoon he was still alive, and reaction to a certain extent had taken place; the hands were of the natural warmth, and the pulse was a shade better. The scrotum had very considerably collapsed from the drainage, which was also the case with the flanks, particularly the right.

At this time it was thought proper to make an effort to introduce a catheter. The swollen condition of the prepuce, however, prevented the meatus from being brought into view. After repeated attempts to strike the meatus with the catheter without success, the prepuce was laid open throughout its whole dorsal portion. It was then discovered that a tight stricture existed about three inches from the meatus. A No. 2 bougie could be tightly engaged in the constricting band. To get through it the following expedient was resorted to: A No. 1 bougie was engaged in the stricture, and the free end of the instrument cut off. The penis being held straight and a little stretched, the canula of a small trocar was passed over the bougie until it rested upon the anterior surface of the stricture. The bougie was next withdrawn and in its place an appropriate trocar was placed, which was thrust against and into the stricture. This permitted the bougie to be passed through the stricture, but not far into the urethra. An attempt was then made to introduce Holt's instrument, when it was found that by a little moderate pressure it could be advanced pretty well into the stricture, at least sufficiently to arrive at the remotest part of its dilating portion. The dilator was then passed and thrust home, and upon withdrawing it it was found that a Holt's instrument closed could be passed sufficiently far to be engaged into the neck of the bladder. A larger sized instrument was next passed home, resulting in the further rupture of the stricture. This permitted the entrance of a tapering No. 10 bougie into the bladder, and afterwards of a good-sized catheter, when eight or ten ounces of urine were drawn off. The urine being clear and free from any admixture, it seemed fair to infer that the bladder was not suffering from any catarrh or other form of inflammation.

The catheter was left in, with directions to draw off the water at stated intervals, and the general treatment was continued. He was admitted on Thursday, and survived until five o'clock Sunday afternoon.

The specimen showed that the interior of the bladder was free from disease, except the thickening of its coats, which condition would naturally coexist with a stricture taxing the muscular power of the viscus. The anterior limit of the membranous portion was the situation of the opening through which the extravasation took place. This was large enough to admit of the introduction of a No. 6 or 7 catheter. The external incision had communicated with the cavity immediately external to this. The laceration of the urethra occupied about the space of an inch, and extended into and exposed the tissue external to the urethra. There was no appearance of any stricture posterior to this.

The question in connection with this rupture suggested itself, whether this extravasation had been preceded by an abscess communicating with or opening into the urethra, of limited dimensions, and whether the rupture of the walls took place when the extensive extravasation occurred. In reference to the probability of this condition of things, he cited an instance of similar cases that were occasionally admitted to hospitals. Patients with old and tight strictures will occasionally call attention to a lump in the crotch. On examination, a deep, hard, circumscribed swelling will be found situated a little to one side of the median line embracing the urethra. The skin will be movable over it, and perhaps not, and perhaps the prominence cannot be recognized. On handling the parts, however, a firm hard tumor is discovered. An exploration of the urethra shows a stricture at the level of this tumor. That swelling is evidently an abscess. Fluctuation cannot be felt in it at first, but its progress is this: The constant action of the *vis a tergo* of the urine crowds the excretion into this abscess, at first small, and keeps up a constant irritation there tending to enlarge it. As it enlarges it produces adhesions, until the integument becomes involved and an external opening is established. But in the progress of this abscess towards the surface, an ulcerative process may be going on internally, and may even get the start of the pointing externally and establish a communication direct with the neighboring cellular tissue, which will in some instances extend so that it may even infiltrate the walls of the abdomen.

In the present instance it was Dr. Buck's opinion that the latter condition obtained. In conclusion, he recommended that such tumors, when found in connection with strictures, should immediately be freely incised in anticipation of trouble that was otherwise sure to come.

POST-MORTEM LESIONS IN FOUNDLINGS.

Dr. Lewis Smith exhibited specimens which illustrated some of the post-mortem lesions that were to be met with in foundlings. He remarked that a comparatively small proportion of foundlings live beyond six or eight months. They come in charge of the city at the age of about a week, and are placed in an institution, and there, with all the possible care that can be given them, they soon begin to waste away, diarrhœa soon occurring, and continuing until the close of life. In many of these cases there is a dry cough, while in others, during the last day or two, symptoms of hydrocephalic disease manifest themselves. In that latter condition the infant becomes, of course, stupid, and passes into a state of collapse, the cause evidently being referrible to inanition.

He presented the brains of two infants who had died under these circumstances; and the large and small intestines of two others.

In connection with the general post-mortem appearances of these cases, he remarked that usually there were evidences of intestinal inflammation, in the shape of injection and thickening of the mucous membrane of the colon. Sometimes this amounted to mere arborescence, and sometimes it was a matter of doubt whether it was simple congestion or not.

In the minority of cases there were no evidences of intestinal inflammation, the mucous membrane being pale, and the follicles and Peyer's patches being somewhat raised. The child then dies of a non-inflammatory diarrhœa. In the majority of cases there are signs of ulceration of the solitary follicles.

The condition of the lung was one of considerable interest, and corresponded with that described by writers as pneumonia induced by inanition—an advanced stage of hypostatic congestion caused by mere feebleness of the circulation. He remarked that for some time past he had given considerable attention to this state of the lung, and had come to the conclusion that in many instances actual pneumonia was caused by the presence of this accumulated blood acting as an irritant.

The brains of those who died with hydrocephalic symptoms were usually congested at post-mortem examination.

In the lungs exhibited there was at one spot well-marked gangrene. This state of things the speaker had repeatedly noticed before, and was inclined to believe that it was the result of general inanition, which was invited to that locality by the extreme feebleness of the circulation through a hypostatically congested part. There was no fœtor of the breath noticed in this case.

Dr. Jacobi could not understand why gangrene should be so localized, and yet dependent upon a general cause, and expressed the opinion that in all such cases some tangible mechanical obstruction must exist to explain it.

Dr. Bibbins believed that the great mortality of foundlings was mainly due to the insufficient supply of fresh air to the wards and rooms which they occupied.

In answer to a question, Dr. Smith remarked that the percentage of foundlings with gangrene of the lungs was about one per cent.

The Society then adjourned.

EAST RIVER MEDICAL ASSOCIATION.

Stated Meeting, October 1, 1867.

Dr. V. Morse, President, in the Chair.

THE ENDOSCOPE AS AN AID IN THE DIAGNOSIS AND TREATMENT OF GRANULAR URETHRITIS AND STRICTURE.

Dr. Stein having read the report of the section on diseases of the urinary organs, made a few remarks explanatory of the endoscope, which he exhibited. He alluded to the fact that gonorrhœa, or acute urethritis, in passing to the chronic stage, extends from the anterior to the deeper portions of the urethra, usually localizing itself at the bulbo-membranous region. The symptoms which indicate this period of the disease are well defined and always recognized; but the exact pathological condition of the urethral mucous membrane was the province of the endoscope to reveal, for by its aid we are enabled to explore the urethral canal, and have presented in an unmistakable manner the true lesions of this affection.

As the tube of the instrument approaches the seat of disease, we observe an abnormal redness, which gradually increases, and becomes most marked at the bulbo-membranous region; at this point its surface appears unequal; these inequalities increase in size and number, and finally form deep-red rounded eminences or granulations, which impressively resemble the granulations of granular conjunctivitis. This condition being accepted as constituting the affection familiarly known as *gleet*, is now more properly called *granular urethritis*. If these granulations are neglected they will sooner or later inevitably lead to the formation of organic stricture; but if timely discovered, direct topical applications through the tube of the endoscope of sol. argenti nitratis (xx. to xxx. grs. to aq. ʒ i.) will remove them, and restore a healthy condition to the mucous membrane.

In impassable organic stricture the endoscope enables us accurately to appreciate its anterior configuration and the exact position of its orifice, so that in case of retention of urine we can afford relief by introducing a small catheter, and obviate, perhaps, the necessity of perineal section or puncture of the bladder. Furthermore, in the operation of internal urethrotomy we have the eye as a guide, and can better limit our incision to the indurated and strictured part, than by any other means.

The field of labor of the endoscope is not confined to the urethra alone; Desormeaux has lucidly demonstrated its utility in the examinations and treatment of the diseases of the mucous membrane of the bladder, cavity of the neck and body of the uterus, ovarian cysts, upper part of rectum, and also in discovering the presence of foreign bodies in deep wounds.

The want of interest manifested in the endoscope, considering that its value is relatively equal to the speculum, laryngoscope, and ophthalmoscope, by many of the profession, is not a little surprising.

Dr. O. J. Ward coincided with Dr. Stein's views, but thought that the value of the endoscope would be still farther enhanced if some means might be devised to keep the transparent orifice of the tube from being obscured by the blood which followed its introduction. He had seen it introduced in two instances, and at each occasion this constituted quite an annoyance.

Dr. Buttles had for some time been in the habit of using a hollow glass tube, whose walls were strong enough to obviate any danger from fracture, into which he directed the light reflected from the mirror in ordinary use by aural surgeons. In this way he obtained a pretty accurate idea of the condition of the urethra, and made his topical applications accordingly.

Dr. Stein had no doubt but that this plan answered well enough in certain cases, particularly where the lesion occupied the ordinary site; still he thought that the endoscope was better adapted to a wider range of investigation.

In reply to a question, he thought that the addition of a few grains of camphor to the oil increased the brilliancy and whiteness of the light. Dr. Bumstead's formula was pulv. gum camphor, grs. xv.; kerosene oil, ℥i.; solv. Dr. Andrews in the *Chicago Med. Examiner* extols the magnesium light. He would also state that Dr. Weir of this city had made a very ingenious modification of Desormeaux's instrument, which might be seen at Mr. Tiemann's establishment in this city.

The meeting then adjourned.

MEDICAL SOCIETY OF THE EASTERN DISTRICT OF BROOKLYN.

Stated Meeting, September 19, 1867.

DIABETES MELLITUS.

Dr. Wieber read a paper on Diabetes Mellitus, of which the following is an abstract:—

He first referred to a case of diabetes which, at the time of writing, had been twenty months under his observation. The patient, a girl aged seven years, had complained for several weeks before medical advice was summoned; at this period, January, 1866, the case presented all the symptoms of diabetes. The urine, which was discharged in large quantities, bore a specific gravity of 1040, and when examined by different tests proved to contain a large amount of grape sugar. The patient was put upon animal food, and the only medicine prescribed was "artificial Vichy water," of which from one to two pints were taken *per diem*. Under this treatment the patient gradually improved, the thirst became less urgent, and the sugar in the urine diminished. At intervals, amylaceous food was allowed, and wine given in small quantities. After six months of this treatment there was scarcely a trace of sugar in the urine, the patient had always a good appetite, and had gained strength. A few months after, this sugar again made its appearance in the urine, but the patient's sufferings were slight. She drank less than before, and the discharge of urine diminished. At present, having been twenty months under treatment, the girl is attending school, and considered well by her parents; but the urine, which has a specific gravity of 1020, contains sugar, which shows that the disease is still going on. During the whole time of treatment no medicine other than the Vichy-water has been given the patient.

Dr. Wieber presented to the Society specimens of chemically pure grape sugar made by himself from the urine of his patient; he also showed, by different tests, the sugar in fresh urine from his patient, of which the following are the simplest and best. First—Take about fifteen or twenty drops of urine diluted with four or five cubic centimetres of water, and about one-half C. C. liq. potassa caustic (or liq. soda caustic), and then, by drops, a very dilute solution sulphate of copper; should there be sugar in the urine the precipitate by agitation will dissolve, forming a clear blue liquid; without agitation the blue liquid has to be heated near to the boiling point, at which a red or yellow precipitate of suboxide of copper will appear. Caution is here necessary lest too much of the copper solution be used. Another portion of urine may be treated in the same way, with the exception of heating it; in the course of twenty-four hours' precipitation will take place if sugar is present.

This second test is important, and never to be omitted, as other abnormal ingredients of the urine will cause a reduction of copper when subjected to heat in this way.—(Trommer's test.)

Second—Take a small quantity of urine in a narrow test tube, add a solution of caustic potassa, and heat the upper part of the liquid; when, if sugar be present, it will become of a yellowish brown color.—(Moore.)

Third—Take equal parts of urine and solution carbonate soda (made of one part carb. soda to three of water), add a small quantity of nitrate of bismuth; apply heat for some minutes, after which the bismuth turns to a gray or black color, according to the quantity of sugar present.—(Boettches.)

Another sure method of testing diabetic urine is by the decomposition of sugar into alcohol and carbonic acid, by adding yeast to the urine.

Referring to different theories of diabetes mellitus, Dr. Wieber quoted from Prof. T. Vogel—Diseases in Urinary Organs. However the organization of sugar may be explained, to cause mellituria, sugar must be accumulated in the blood and is dissolved in the serum, which in patients suffering from diabetes mellitus has a higher specific gravity (1033 instead of 1029).

This concentrated blood serum is absorbing, according to the law of endosmosis, the water from the liquids of the parenchyma as well as from water taken with the food and drink. In consequence of this the blood-vessels are overcharged; a plethora takes place, which causes a higher degree of pressure in the vascular system, especially in the kidneys, resulting in polyuria. By this theory the thirst, dry skin, and other symptoms of diabetes mellitus are easily explained.

The duration of diabetes mellitus is very variable. Prof. Griesinger, of Berlin, recorded one hundred cases, ranging as follows:—

Less than a quarter of a year, 1; quarter to one-half, 2; one-half to one, 13; one to two, 39; two to three, 20; three to four, 7; four to five, 2; five to six, 1; six to seven, 2; seven to eight, 1.

Twelve cases were uncertain. Griesinger found that from two hundred and twenty-five cases, seventy-six per cent. were males, and twenty-four per cent. females. Considering the age, there were under

Ten years, 6 cases; ten to twenty, 36; twenty to thirty, 46; thirty to forty, 60; forty to fifty, 36; fifty to sixty, 14; sixty to seventy, 7; seventy to eighty, 1.

According to Griesinger's collection of post-mortem examinations of sixty-four cases, there were forty-three per cent. complicated with tuberculosis pulmonalis, and thirty-two cases were kidney diseases, viz.—hyperæmia, 5; enlargement, 7; abscess, 3; Bright's disease, 17.

On motion, the Society then adjourned.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, Nov. 3, 1867.

Dr. Edmund R. Peaslee, President, in the Chair.

SUMMARY OF THE PRESIDENT'S ADDRESS.

Dr. Peaslee delivered the inaugural address, the subject of which was "The Aims and Qualifications which Conduce to Render Man an Ornament to the Medical Profession." After referring to the veneration paid to the science of medicine by the ancients, he invited attention to the qualities that were essential to make a physician an aid to his fellow mortal and an ornament to the profession. The first requisite was a sound, thorough education before entering into practice. He then instanced some of the evil results which followed the efforts of young

men who practised medicine without first gaining a knowledge of the studies which should precede that course. A study of anatomy should precede physiology, and that of both, pathology. He next alluded to the brief time allowed in some colleges for the graduating of students, and characterized the system as one that did great injustice to the students and the public. He also showed the importance that a physician in practice should keep himself fully informed, by reading, of the new principles developed in medicine, and took the ground that a physician should not allow any other occupation to interfere with his profession. He recited numerous instances to prove that many physicians, whose names are eminent in history, and whose practice was exceedingly laborious, found ample time to read and write medical works. A physician could not expect to gain eminence at once, and young men need not despair of achieving fame. It took Harvey thirty-six years to perfect his system of the "Circulation of the Blood." Neither did advanced age disqualify men from engaging in active business pursuits, and it would not do for a physician to rely wholly upon his experience. There was always something to learn; and practice did not necessarily give experience. Another requisite to the success of the physician was piety. The speaker closed his address with an appeal to his hearers to observe those qualities which tend to make the profession useful and eminent.

Dr. Roosa then read a paper entitled, "Remarks on the Diagnosis and Treatment of Diseases of the Ear."

Dr. Griscom followed with a description of a new form of Family Record.

The Society then adjourned.

Progress of Medical Science.

The Treatment of Contracted Muscles and Tendons.—The treatment of contracted muscles and tendons, as advised by Dr. H. G. Davis, of this city, in his work on *Conservative Surgery*, is based upon the good effects of a state of constant tension. The author maintains that whenever any circumstance shortens the relative distance between the points of origin and insertion of any muscle or tendon, there is an absence of the natural stimulus to the normal nourishment of the parts; that, in other words, no more of the nutritive element is effused than is barely requisite to maintain such tissues in their shortened condition. If, under these circumstances, extension is employed by the elastic method, the contracted tissues are kept constantly upon the stretch, and are gradually elongated to their normal dimensions. As a consequence of this continuous tension of the fibres, the supply of nourishment is proportionately increased, so that eventually, by the constant supply of new material, the parts actually grow to their natural length and original strength. His observations with reference to this point have, he assures us, been amply and satisfactorily proved as the result of fifteen years of experience.

The advantage of elastic extension over other methods consists in the fact that it is constantly kept up, and that, as the muscles or tendons give way to the force exerted upon them, there is always enough power of extension in reserve to keep up the action and follow up the good effects. This continuous tension stimulates the deposit of new material, so that the growth of such shortened tissues is more rapid than under ordinary circumstances. As extension is ordinarily kept up by inelastic bands, the force is constantly liable to be reduced by the relaxations of the appliances, which must, in a longer or shorter time, yield to the stretching to which they are subjected. This principle can be satisfactorily applied to all cases in which it is necessary to overcome undue contraction of the soft parts from any cause save actual organic interruption of nerve power; such, for instance, as in deformities attendant upon contractions after inflammations of the joints, upon the different varieties of talipes, upon the deformities after fractures and old dislocations, and even upon the retraction of the integuments after burns. In the latter case the strain is put upon the surrounding skin by means of adhesive plaster in opposite directions to the contracting forces in the ciatrices. The general plan of treatment has to be modified in accordance with the special indications that may be present in each case, constantly calling the ingenuity of the surgeon into play. He does not consider division of the tendons as at all necessary for the accomplishment of permanent elongation of contracted parts, and affirms that continuous elastic extension, intelligently employed, is all-sufficient to overcome the most obstinate contraction.

In many cases where muscles are firmly contracted, and antagonistic ones, by constant stretching, by derangement of nerve force and deprivation of proper nourishment, are paralyzed, he assists nature by supplying by means of india-rubber webbing an artificial muscle on the paralyzed side. By this means the contracted muscle is not only elongated, but its antagonist is proportionately shortened, and in both instances the power of muscular co-ordination is regulated by an equal distribution of nerve power.

Again, in order to exercise more power upon the contracted muscles, he employs pressure upon their bellies; at the same time makes use of the elastic extension besides. This is accomplished by employing two sets of adhesive plasters, so arranged fan-fashion, one strip overlapping the other, that they will cross each other over the belly of the muscle. To the smaller extremities of each one of these sets is sewn a piece of elastic webbing to which the extending force is attached. If it is desired, for instance, to make extension by this means upon the extensors of the thigh, strips of plaster are applied from below upwards diagonally across the front of the thigh, first upon one side and then upon the other, the sets crossing each other at acute angles in the median line of the limb. A firm roller is applied over the whole to keep the plasters in position, while, to the ends of the strips as they lap upon each other, on both sides of the knee strong webbing is sewn for the purpose of connecting with the elastic extension below. Extension being applied, the extensor muscles are not only put upon the stretch, but the diagonal position to the two sets of plasters by virtue of the direction of the strain, compresses the bellies of these muscles besides. This plan of treating muscles is not only applicable to cases of joint-disease and the like, but may be advantageously employed in cases of fracture in which the powerful action of a certain set of muscles obstinately tends to keep up a constant separation of the two fragments. In attaching the elastic webbing to the soft parts the ordinary adhesive plaster carefully and smoothly applied is always used, and is in turn maintained in its position by nicely adjusted bandages.

Next to a fair share of mechanical ingenuity in the use of this method of extension, success is only gained by the exercise of much patience and firmness on the part of the attendant, so that a constant stretching of the parts day and night be kept up for weeks. Intermissions in such a course, if allowed to occur either by neglect, design, or discouragement, are attended with the loss of much more ground than at first would be expected, owing to opportunities thus granted to the contract-

ed tissues to recover in some degree the strength of habit.

As an evidence of the good effects of this method of extension, Dr. Davis asserts its power to relieve the pain which is sometimes such a distressing accompaniment to some forms of muscular contractions. He believes that the contraction of the muscles around diseased joints is first produced by an effort of the will to hold the parts motionless and in as comfortable a position as possible, and that the muscles getting into the habit of contraction, the exercise of the will is no longer necessary to keep up the contraction.

A Fracture of the Cranium, with penetration of a bony spiculum into the brain and loss of brain substance, is recorded in the *Gaz. des Hôp.*, the remarkable feature of which was recovery within six weeks.

The Arrest of Hæmorrhage by Acupressure (if we may judge by the tenor of several articles in the *Medical Times and Gazette*, the *Lancet*, and in special treatises) is steadily growing in favor. It is claimed for this method that it is not only an efficient hæmostatic, but that it accelerates the healing of wounds, and that "union by the first intention" has been repeatedly effected in stumps of the thigh without a *drop of pus!*

The experience of our own surgeons is rather adverse to this mode of treatment, it having been found in several instances that a suppurating tract had been established by the needle.

The Styptic Collodium composed of tannin, alcohol, ether, and gun cotton, is highly extolled by Dr. B. W. Richardson, in the *Med. Times and Gazette*, as favoring "union by the first intention."

The Extirpation of Nævi by Enucleation.—An article "on the enucleation of nævus" appears in the *Brit. Med. Journal*. This advance in treatment is the result of Mr. Paget's investigations. He demonstrated the existence of a distinct sac in these cases, and upon this fact is based the above-mentioned operative procedure.

Shampooing in Sprains.—M. Beringer Ferand (*Bull. de Thér.*) advocates shampooing in the case of sprains. He advises the attendant to begin with gentle passes and movements, to be gradually increased in force. Cold lotions and rest should follow. The manipulations should always be towards the body.

Applications for Carbuncles after Incisions and Indolent Ulcers.—A solution of permanganate of potash (℥ ss.–℥ j.) is strongly advised as a dressing after the incision of carbuncles, and as application to ulcers. —Dr. Leavitt, *Am. Journ. Med. Sciences.*

Another writer (Dr. D. A. Morse, *Med. and Surg. Reporter*) prefers the claims of the following application in indolent ulcers, where the tissues are dark and indurated. ℞.—Plumbi subacet., 7 parts; pulv. opii, 1 part; hydrarg. submur., 2 parts. He claims that it relieves pain, induces a healthy appearance, etc.

Period of the Growth of Man.—Prof. B. A. Gould, from statistics derived from the register of two and a half millions of men in the United States Army, has brought out the fact that men attain their maximum stature much later than is generally supposed. This takes places commonly at 29 or 30 years of age; but there are frequent instances of growth until 35, not very noticeable—a yearly gain of a tenth of an inch, perhaps—still a growth. After 35, the stature subsides in similar proportions, partly perhaps from the condensation of the cartilages, partly because of the change occurring in the angle of the hip bone. The age for maximum stature comes earliest to the tallest men, as if it were the necessity of unusual development. Foreigners were shorter than men of native birth. The height of men seemed to depend on the place of enlistment. A Massachusetts man enlisting in Iowa was an inch taller than if he had stayed at home. As we go west, men grow taller. One man measured more than 6 feet 10 inches. Out of 1,000,000, there were 5,000 who measured more than 6 feet 4 inches; but men of such stature do not wear well. In Maine, men reached their greatest height at 27; in New Hampshire, at 35; in Massachusetts, at 29; in New Jersey, at 31. The tallest men, of 69 inches, come from Iowa. Maine, Vermont, Ohio, Indiana, Minnesota, and Missouri, give us men a little over 68; and the average of all shows the Americans to be "a very tall people."

Magnetism not Resident upon the Surfaces of Bodies.—In a discussion on this subject, before the British Association, Sir William Thompson took exception to the remark that magnetism, like electricity, distributes itself upon the surface of bodies. The same statement had been made by authors of repute; but it only added proof to the fact that in many popular books there were statements not merely false in theory, but false as being in direct opposition to facts published many years ago. Harlow, in experimenting with bars of iron, found, long ago, that the magnetic influence was not discoverable. His experiments were not carefully made, yet he rashly stepped to the conclusion that magnetism resides at the surface; and, although it was soon proved incorrect by a celebrated mathematician, this statement has been the fruitful parent of many fallacies.

The most Frequent Seat of Urethral Stricture. —M. H. Follett (*Archives Générales de Médicine*, April, 1867; *Gazette Hebdom.* April 12, 1867) believes that organic strictures of the bulbo-membranous region, though pronounced to be frequent, are rare. He publishes six cases of organic stricture, of which one alone occupied the bulbo-membranous region, while the remainder occupied the spongy part.

The Treatment of Hydrocele of the Cord.—M. de Luci (*Gaz. des Hôp.*) reports a case of encysted hydrocele of the cord cured by alcoholic injections.

The Radical Cure of Varicocele.—Maisonneuve (*Edinburgh Med. Jour.*) recommends coagulating injections of the perchloride of iron for the radical cure of varicocele.

A Simple Remedy for Polypi of the Nares.—Dr. T. Bryant (*London Lancet*) treats mucous polypi of the nares with tannin used as a snuff.

Successful Closure of an Artificial Anus.—Dr. J. B. Graves (*Med. and Surg. Reporter*) furnishes a unique history of a case of strangulated hernia. Operation was performed, and followed by an artificial anus. In due time this was closed by Dupuytren's method. Twelve years after, the patient reports herself in perfect health; she can feel the transit of fæcal matter along the gut at the point where the artificial anus was, and can even assist its passage by manipulation.

A Rare Result of Catheterism.—M. Foucher (*Hôp. St. Louis, Gazette des Hôp.*) publishes a case where catheterism was followed by orchitis, suppuration and elimination of the tissues of the testicle, peritonitis, and death. The points of interest are: (1) An example of suppurative orchitis with elimination of the seminiferous substance. (2) The transmission of inflammation from the testicle and epididymis to the cord, then to a hernial sac, and, finally, to the peritoneum.

A Unique Affection of a Nerve is reported in the *Trans. of the Med. Chirurg. Soc., London* (vol. xlix. p. 29). "An arterio-venous cyst was found in the popliteal nerve," after amputation of the thigh.

Infusion of Coffee in Strangulated Hernia.—The administration of infusion of coffee (℥ iij. freshly roasted and ground coffee, to five cups of boiling water) induced spontaneous reduction in a case of strangulated hernia which had been doomed to operation.—Dr. A. Burillon. *Bull. de Thérap.*, lxxii., p. 82, Jan. 30, *Lancet*, Mar. 16. *Half Yearly Abst.*, xlv.

Treatment of Gonorrhœa.—Dr. Dyes (*Schmidt's Jahrbücher*, No. 2, 1867) says: "Copaiba, it is known, does harm at the commencement of gonorrhœa; it does but little good after the inflammatory stage has passed off. It is almost incredible how practitioners, who throughout the whole course of gonorrhœa order abstinence from everything likely to cause irritation, can, in direct opposition to this, prescribe a medicine so irritating to the kidneys and urinary passages as balsam of copaiba." His treatment consists in subduing inflammation of the urethral mucous membrane by soothing, mucilaginous, and cooling medicine, combined with a spare diet and rest, and directly after the removal of this inflammatory condition, an injection of zinci sulph. is applied to the urethra.

M. Luc, in the *Brit. Med. Journal*, March 23, recommends a tolerably thick solution of starch in acute urethritis. "It never produces pain, and avoids strictures."

Pepsin in the Vomiting of Pregnancy.—A number of French physicians declare the efficacy of pepsin in the vomiting of pregnancy. It should be given in the dose of eight or ten grains, before eating. Hydrochloric acid is also recommended as equally efficient—thirty to sixty drops to be taken daily, properly diluted. Strychnia, we think, is not inferior to either, the twentieth to the twelfth of a grain three times a day.—*Pacific Med. and Surg. Jour.*

Ratio of Deaths from Inhalation of Chloroform.—Edmund Andrews, M.D., in a letter to the *Chicago Med. Enquirer*, states that he has been at some pains to discover the ratio of deaths from the inhalation of chloroform. The surgeons of London do not seem to be fully aware of the real mortality attending its administration, Mr. Simon even expressing the opinion that it is safer to take chloroform than to take a ride in a railroad car. Figures have been collected from fourteen hospitals in Liverpool and London. Reliable accounts of chloroform being administered 83,059 times were obtained, and of these 24 proved fatal, or 1 in 3,461. A railroad in active business with a mortality like this would kill from 500 to 3,000 passengers every year. Dr. Andrews advises the use of ether, reserving chloroform for those who do not come under the influence of ether. Possibly the tetrachloride of carbon may prove to have the safety of ether and the promptness of chloroform. The statistics above given were gathered from surgical cases, and are of no value in testing its safety in obstetric practice.

Enlargement of the Colon.—Dr. Wm. Sewitt, in the *Chicago Medical Journal*, relates the history of a case to which he was called to relieve a patient who had not had an evacuation of the bowels for three weeks. During this time the patient had been in the hands of a *spiritual doctor* who said he was suffering from "*windy dropsy*." The patient was suffering from intense pain in the abdomen, with frequent desire to expel flatus from the rectum, which he could only accomplish by placing himself upon his head and hands in a perpendicular position. The abdomen was enormously distended, and so tense that it was impossible to find the outline of any of the abdominal organs. Since a similar attack about nine years before, he had had a torpor of the bowels, having an evacuation once in eight or ten days. An examination per anum revealed what seemed an enormous tumor, filling the entire pelvic cavity, with a resemblance to a child's head at term. The rectum appeared normal. He had taken powerful cathartics, and copious enemata were ordered, but in attempting to use them they did not pass beyond the rectum, and flowed immediately back. A long rectum-tube was then used, but could not be carried further than the upper portion of the rectum, when it would fold upon itself, showing obstruction at the sigmoid flexure. Laxatives were afterwards used, but to no effect, except occasionally to expel some flatus. He continued in this condition for about a week, when he was suddenly seized with an excruciating pain in the abdomen, and in a few hours expired. An autopsy revealed the peritoneal cavity enormously distended with gas, and a large quantity of fæcal matter, of the consistence of batter, was extravasated into it, showing that perforation had taken place—the immediate cause of death. The perforation was at several points of the colon. The ascending and descending colon appeared like two immense cylinders lying side by side, extending from the epigastrium to the pelvis, being about five and a half inches in diameter, and filled with soft fæcal matter. The two cylinders were folded upon themselves, filling the entire surface of the abdominal cavity. The sigmoid flexure was about the same diameter, and what was supposed to be the tumor filling the pelvic cavity was the sigmoid flexure distended with fæcal matter and folded upon itself, giving the firm and rounded shape of a pelvic tumor, and pressed so firmly upon the upper portion of the rectum as to prevent all passage of fæcal matter into it. The colon was very much thickened, and completely filled with fæcal matter of the consistence of batter, containing over a large wooden pailful, besides what had passed through the perforations into the peritoneal cavity.

Venomous Bites.—By J. T. Newman, M.D.—A man was bitten on the right tendo achillis by a rattlesnake, and was found three hours after suffering the most excruciating agonies. The right side was swollen all the way from the heel to the shoulder, pulse varying from 130 to 145, the respiration from 36 to 40, and he also foamed at the mouth, gnashed his teeth, and violent spasms would ensue. Thirty grains of morphia and a gallon of brandy were ordered. He was given five grains of the former and eight ounces of the latter. The swelling was rapidly covering the entire body. At the end of an hour from the time the first dose was given, the same dose was repeated, and also a poultice of stramonium leaves was applied. It could now be plainly seen that the spasms were subsiding. The brandy was then given in doses of four ounces every fifteen minutes. This treatment was kept up for six hours, changing the poultices every half hour. At the end of that time he fell into a sleep lasting four hours. The swelling now commenced to subside. When he awoke the same dose of morphia as first given was repeated. Two ounces of aq. ammoniæ were mixed with an equal amount of brandy, and after two doses of this mixture he slept several hours. Within as many hours he had taken thirty grains of morphia, a gallon of brandy, and four ounces of ammonia. Except at the part bitten, the swelling had almost subsided. It exuded a greenish fluid, which may or may not have been the virus. The patient recovered.—*Chicago Medical Journal.*

The Medical Record.

A Semi-Monthly Journal of Medicine and Surgery.

George F. Shrady, M.D., Editor.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 Walker Street, New York.

FOREIGN AGENCIES.

London—Trübner & Co. | Leipsic—B. Hermann.
Paris—Bossange et Cie. | Rio Janeiro—Stephens y Ca.

New York, November 15, 1867.

CONCERNING PRESCRIPTIONS.

It has become of late a fashionable practice with the apothecaries to sneer at the qualifications of physicians as prescribers. At first sight we might explain this on the supposition that they are too zealous in urging the claims of their specialty, and too fearful of the possibility of their calling being left out in the cold. It is perfectly natural for any class of individuals to have the interests of their trade or profession dearest to their hearts, and so far as this is an element in their dissatisfaction we must stand ready to excuse them. But that is only in part the cause, for their reflections upon our knowledge of and interest in pharmacy are made appallingly apparent when we calmly examine the question.

There is no disguising the fact that the majority of us merit, to no small extent, all the aspersions which the pharmaceutists heap upon us, and that to the respective charges of carelessness and ignorance we have to put in the plea of guilty.

The first of these charges is not difficult to prove. If any one has gratified a curiosity to fathom the mysteries of the doctors' hand-writing, as seen in the books of our apothecaries, he must be struck at first sight with its illegibility. The page of such a volume spread out before him, looks more like one covered with the cabalistic tracings of some astrologist, than the production of the enlightened professional man of the nineteenth century. If he has the time and patience to decipher some names, and guess at the rest, as he must of necessity be forced to do, he will come to another conclusion: that the doctor is withal rather an ingenious letter-former, as well as an accomplished abbreviator of symbols. This gratification of the inventive faculty would be innocent, even praiseworthy, if it were diverted in a somewhat different channel, where mistakes in guessing and lack of a special genius in appreciating are not apt to be attended with disagreeable, if not dangerous results. When he assumes that the apothecary is a mere person to obey absolutely his directions, and that the patient is supposed to take with unquestioned confidence the different powerful articles that may be written for, he should at least be careful that his meaning is clearly understood. We have no right to throw any extra responsibility upon the compounder of our receipts; and it is more than we have reason to expect that he can always hit the mark, notwithstanding the almost constant practice to which his cleverness is subjected.

The carelessness in writing is in fact one of the main complaints which the compounders have against us; it is justly the crying evil of the prescription-counter, and there is every reason why we should cause it at once to cease One of these gentlemen told us that he actually dreaded to receive some of the prescriptions written by many of his bad-writing patrons, as with most of them he had to waste much valuable time in deciphering, and then not unfrequently was compelled to keep the patient waiting while he despatched his errand-boy, that he might obtain from the writer himself a translation of the important document. This, too, was ofttimes exceedingly difficult when the tracings were over an hour or two old. In this connection he informed us of instances in which the lives of patients were actually saved by the adoption of such a course. Is it not fair then to conclude that he, in common with the rest of his fraternity, had just cause for complaint? These were the gentlemen who were in the habit of scrawling the receipts with very hard lead pencils on the ends of brown wrapping paper and the leaves of old books, and who did not seem to think that the apothecary had the right to ask anything more of them.

The only explanation why this abuse has not been remedied is perhaps to be found in the very small amount of trouble and slight increase of care required on the part of the writer. If physicians generally would take as much pains in writing their prescriptions as in figuring the items in their bills, no one could fail to understand what was meant.

There is no necessity, however, of enlarging upon this particular point, but we will call the attention of those interested to other faults in prescription-writing. The first has reference to the lack of a sufficient knowledge of pharmacy to enable us at all times to make scientific prescriptions. The majority of us are constantly committing these mistakes, and are day by day laying ourselves open to the deservedly severe ridicule of our druggists. The foundation of all this ignorance rests upon a defective medical education, such as is carried on in most of our medical schools. The only practical familiarity which the students receive of the reactions of any pharmaceutical article is the writing of it in a lecture note-book, while the only remembrance is centred in some bottle containing the specimen which has been passed around the class. The whole study of materia medica, as generally carried on, is a mere effort of memory; and it is not remarkable to find that the different reactions, modes of combination, etc., are occasionally forgotten. The fact that our best prescribers are those

who have some time during their pupilage been at work in the prescription department of some shop, should not have its significance lost upon those who still have opportunities for similar improvement. It is only the occupation of some such position in earlier professional life that can safely secure the practitioner against the repeated occurrence of numerous ridiculous and annoying blunders.

But there is another point connected with prescription writing which deserves at this time a passing notice, and that has reference not only to the correctness of the compounds to be employed, but to their elegance and inviting taste. This is truly an art by itself, and when once mastered is of incalculable value to any one who is called upon to treat such as are tormented with tastes that are fastidious. The great objection which many homœopathic patients have against our system of practice is the administration of our nauseous draughts. We cannot quarrel with these people for any dislike they may entertain towards many of our disagreeably tasting drugs; but we should endeavor, by skilful combinations, by the judicious use of the active principles and the employment of concentrated medicines, to do away with the necessity for complaint. The practitioner who can contrive to give a small dose which shall equal in power a larger one, and at the same time divest it of any objectionable taste, will certainly be preferred to his less thoughtful brother.

There is another light in which this matter of refinement in prescriptions can be viewed, and that is the increased tolerance of those remedies which are made more or less agreeable to the palate. Quinine, cod-liver oil, many of the preparations of iron, and a host of others too numerous to mention, can be administered for long periods when properly combined with aromatics, and the like, when without them the stomach of a feeble patient might be constantly nauseated. If more care were taken to render palatable the remedies prescribed to children, there would be less repugnance on their part to the very name of medicine. Let a child take a grain of quinine in a simple solution, and let the nurse choke it down his outraged throat by dint of holding the little one's nose, and by other little tricks which these tender-hearted females know so well, and a prejudice against anything in the shape of medicine is formed which it requires years to eradicate. The same may virtually be said of those of less tender years, who will, despite their best intentions, enter their natural protest against a nauseous compound.

Many of us do not appreciate the importance of palatable mixtures, and not a few refuse to believe that pharmacy is incapable of dressing up the most noxious agents in the guise of agreeable and even tasty compounds. There is nothing in science that forbids its association with refinement; in fact the customs of the present day demand that they should be inseparable, and the physician who takes the hint can find no more difficulty in keeping his patients in good humor, in preventing the formation of wry faces, and in saving his medicines many hard names, than he has in the majority of cases in curing the sufferers of their maladies.

The remarks concerning the remissness of the Board of Health which we have recently made, we are happy to inform our readers were founded upon a misapprehension of the facts of the case. Since writing them, we have received a letter from Dr. Dalton, the Sanitary Superintendent, which presents us with an official statement of the doings of that Board, and which most effectually explains away the reasons for our strictures. We are informed that the Board is still doing its whole work, that the sanitary inspectors are as faithful in the performance of their duties as ever, and that the reports referring to the existence of unabated nuisances, although founded on fact, are really unavoidable, inasmuch as it has been found impossible, on account of the immense number of complaints on hand, to attend to them with that despatch that is desirable. We are glad to hear this, and to be assured that we have been in error in supposing that the delays were due to any dereliction on the part of the inspectors, but rather to circumstances over which the Board itself has no control. We shall soon take occasion to refer more in detail to the workings of this body, and to the obstacles which oppose its praiseworthy efforts.

We have been compelled, on account of a press of material, to defer to the next number an interesting lecture by Prof. Loomis, and an elaborate and finished article by Prof. Joseph Jones, of Nashville.

Reviews and Notices of Books.

The Physiology and Pathology of the Mind. By Henry Maudsley, M.D., Lond. D. Appleton & Co., 443 Broadway, N. Y. 1867. 8vo., pp. 442.

This very important work treats of mental phenomena from a physiological, rather than a metaphysical point of view, and brings the many instructive instances presented by the unsound mind to bear upon the obscure problems of mental science. The physiology and pathology of the mind have, indeed, been too long divorced; and it is time some effort should be made to reconcile these two branches of science. Metaphysical writers have gone on treating mental diseases as pure abstractions, as having no connection with the organization, as if, in short, they belonged to a science which is entirely distinct from that which is concerned with the sound mind. To the medical profession, chiefly, belongs the great credit of exploring and discovering the physical conditions of mental function, and the relation of the phenomena of the sound and the unsound mind. Notwithstanding the great advance that has been made in modern times in the science of mind, some of our teachers of mental philosophy still inculcate the absurd doctrine, that we are acquainted with mind and body as two distinct and separate entities, as if they were separate subjects of investigation; either not connected at all, or only in a very remote and unimportant degree. Our clergy, who generally found their moral and spiritual inculcations on the same false basis, are often

horrified at the sinfulness of a sleepy congregation, who are breathing an atmosphere containing fifty per cent. of carbonic acid. They talk of the faculties and dispositions of the mind without the slightest apprehension apparently, that they are in close connection with the body. A perusal of the memoirs of Edwards, Payson, and other celebrated divines, who speak of their varying moods, dispositions, and feelings, as wholly influenced by supernatural and never by physical influences, must satisfy every person of the general truth of this remark.

How often must the fact be enforced, that the human mind, as it exists in this world, cannot, *by itself*, become an object of philosophical investigation; that, placed in a material world, it cannot act, or be acted on, but through the medium of an organic apparatus? The physician sees the most abundant proof on every hand, that the state of the physical organs exerts a commanding influence over the mental manifestations, and he needs no argument but daily observation to satisfy him that no system of mental philosophy is entitled to consideration which overlooks or denies their influence, and treats the thinking principle as a disembodied spirit. We must take man as he exists in this world, and carefully investigate the laws which regulate the connection between the organs and the mind, not expecting to discover the essence of either, or the manner in which they are united.

This work of Dr. Maudsley is unquestionably one of the ablest and most important on the subjects of which it treats that has ever appeared, and does infinite credit to his philosophical acumen and accurate observation. No one has ever more successfully exhibited the discordant results of metaphysical, physiological, and pathological studies of mind, or demonstrated more satisfactorily the uselessness of an exclusive method, or the pressing need of combined action, and of a more philosophical mode of proceeding. The work consists of two parts; the first part, resting on the physiological method of inquiry into mental phenomena, treats under nine different chapters of "The Method of the Study of Mind;" of "The Mind and the Nervous System;" of "The Spinal Cord and Reflex Action;" of "The Sensory Centres and Sensation;" of "The Supreme Cerebral Centres and Ideation;" "On Emotion;" "On Volition;" "On Actuation;" and "On Memory and Imagination." One hundred and ninety-four pages are devoted to the discussion of these subjects. Many of the views presented are similar to those laid down in the recent writings of Herbert Spencer, Dr. Laycock, and Dr. Carpenter, and with which the readers of the RECORD are doubtless more or less familiar.

Our limits, however, much to our regret, oblige us to pass on to the second part of the work, which treats of the *pathology of mind*, under the following heads: "On the Causes of Insanity;" "On the Insanity of Early Life;" "On the Varieties of Insanity;" "On the Pathology of Insanity;" "On the Diagnosis of Insanity;" "On the Prognosis of Insanity;" and "On the Treatment of Insanity."

In regard to the alleged *causes of insanity*, we have, with the author, always considered them as so vague and general, as to render it extremely difficult to ascertain, with any precision, what they really are. The uncertainty springs from the fact, that in a great majority of cases there is a concurrence of conditions, and not one single effective cause. All the conditions which conspire to the production of an effect are alike causes, alike agents; and therefore, all the conditions, whether in the individual or in the circumstances in which he is placed, which in a given case coöperate in the production of disease, must alike be regarded as causes. Hence, we have looked upon the assigned causes of insanity, as contained in the annual reports of our superintendents of Insane Asylums, as not only worthless, but worse than that, false and deceptive. They would have us believe, forsooth, that a patient has become insane from grief, from anxiety, vanity, ambition, religious excitement, despair, etc., as if these, frequently only the early symptoms of mental disease, were its true and real causes! The fact is, that the causation of insanity may often extend over a lifetime, and its germs are latent in the very foundations of the character, the final outbreak being perhaps only the explosion of a long train of antecedent preparations. There are successive links of causation, sometimes traceable, sometimes not, as the inevitable consequence of certain antecedents; it is palpably absurd to assign mental derangement to the influence of any single cause. It is common to treat of the causes of insanity as physical and moral, but it is manifestly impossible to discriminate them with any tolerable exactness. The truth is, that every moral cause operates through the physical changes which it produces, and in the great majority of cases in which the cause is considered as moral, there is something in the physical constitution by the coöperation of which the result has been brought about.

Our author notices one fact which deserves serious consideration, and which is as applicable to our own country as to Great Britain, and that is, the large increase of late years in the number of the insane who have come under care and observation. He quotes the Reports of the Lunacy Commissioners to show that, on the 1st of January, 1849, there were 14,560 patients in the hospitals, asylums, and licensed houses of England and Wales; that six years afterwards, on the 1st of January, 1855, there were 20,493 insane; that ten years afterwards, on the 1st January, 1865, there were 29,425 insane under certificates; and that on the 1st January, 1866, the number had risen to 30,869; thus showing a steady increase of about 1,000 a year, in the insane population of England and Wales, for the last 17 years; an increase far more than proportionate to the population. From the best statistics we can gather, the same disproportionate increase of the insane is true as regards the United States; though something may be due to the large number of cases formerly unreported, but which more stringent legislation has brought under observation, and to the larger number of insane, especially of the pauper class, who are now sent to asylums; and lastly to the prolongation of life in those who have been brought under proper care. Perhaps, also, more people are now thought to be mad than was formerly the case. Besides, our asylums have become so palatial, so desirable as elegant and commodious residences, that they are not only resorted to by those who are not insane, but continue to be the abodes of many after they have recovered, as the most eligible resorts anywhere to be found. In fact, fewer persons proportionately, are now discharged from our asylums, either by death, or by being thought to have recovered, than formerly; hence, one reason for the increase in the number of our insane hospitals.

Passing over the intermediate subjects, for the consideration of which we have no space left in our columns, we come, lastly, to the *treatment of insanity*, in all respects, perhaps, the most important branch of the subject.

We agree with our author, that in no other disease are the difficulties of treatment so great as they are in insanity—difficulties, not only appertaining to the nature of an obscure disease, but increased and multiplied

by the social prejudices connected with it; by the frequent concealment and misrepresentation on the part of the friends of a patient; but, also, by the unsatisfactory character and management of institutions especially established for the reception of insane persons, and the tendency of recent lunacy legislation (we refer particularly to the legislation of our own country), which has overlooked the great class of the chronic insane, now inmates of jails and alms-houses, and provided only for acute and recent cases. We may say of many of our States, as of England, the land is being covered with overcrowded asylums, to which it is designed that the great mass of the lunatic population shall be consigned, irrespective of circumstances or conditions, where they may be kept safely imprisoned and secluded from the public eye, lest the tender sensibilities of friends and relations may be hurt, or their feelings disturbed. Once there, it would seem that the whole object was accomplished, for there is little if any inquiry ever made, whether all is done that can be to secure the best medical treatment of those who are curable, or the greatest comfort of those who are incurable. The persistence with which the superintendents of our insane asylums have recently opposed the separation of acute and curable cases from the chronic and for the most part incurable cases, shows, we regret to say, a determination to resist all innovation, however desirable, and however beneficial to the insane it may promise to be, and however supported by experience, reason, or weight of authority. Very slight observation must satisfy us that there is at this time, and in our country, a public jealousy of asylums and those who superintend them, which will require a wise and cautious management to overcome. The cruelties of former years yet live in the public memory; and though to be rid, at any cost, of the offending presence of the insane, may satisfy the false views and perverted feelings of some, yet there is an enlightened public conscience, and a right moral feeling regarding this unfortunate class, which will hold those who have charge of them to a strict personal responsibility. To be called a lunatic, is too often equivalent to being cut off socially from all humanity, and those in charge of asylums are strongly tempted to be satisfied if they render their establishments secure prisons and lock-ups. Indiscriminate sequestration seems to embody all requirements; and all treatment, moral and physical, ends in proper classification! Untold evils have arisen from the assumption, that because a man is disturbed in his intellect, he must, therefore, be shut up in an asylum; whereas the true principle to guide our practice should be, *that no one, sane or insane, should ever be entirely deprived of his liberty, unless for his own protection, or for the protection of society.* We therefore fully agree with our author in saying that, instead of acting on the general principle of confining the insane in asylums, and making the particular exceptions, we ought to act on the general principle of depriving no one of his liberty, and of then making the numerous exceptions which will undoubtedly be necessary in the cases of insane persons, as in the cases of criminals. We confine the insane, not as criminals, in order to punish or reform, but to *cure* them, and to protect themselves and society against their violence. Now, no one will deny that there are many chronic and incurably insane persons, neither dangerous to themselves nor others, and who are able, and would be benefited by some light bodily labor, who are at present closely confined in our lunatic asylums, and who ought, by every consideration of expediency and humanity, to be at large. We deny the assumption, so persistently acted upon, that it is no inhumanity to keep them shut up as long as they are insane. Our humane legislation in New York, it is true, causes their removal from our State asylum if not benefited or cured at the end of a year, to those well managed, philanthropic institutions, *county poor-houses and jails*, where they generally remain till death steps in to put an end to their sufferings! But in our other asylums they seem to be kept because they have been once put in—properly, necessarily, or not; sometimes, we fear, because it is thought their existence should not be known to the world; and often to save trouble, care, or expense! If the principle of *non-restraint* in asylums is so admirable and beneficial as all attest it to be, how vastly more beneficial would be the abolition of the restraint of asylums themselves, as in Belgium? Such is the sage suggestion of Dr. Maudsley.

In the statements and principles above laid down, we have only followed in the steps of our author, who has given every one of them the sanction of his authority.

It is not proposed by Dr. M. to leave the insane not in asylums without proper care and control, but to have them provided for in private families, as in Scotland and Belgium. No one can properly appreciate the strength of the passion for liberty which there is in the human breast, even in the insane; and "there is no one," says our author, "who would not infinitely prefer a garret or a cellar for lodgings, with bread and water only for food, than to be clothed in purple and fine linen and to fare sumptuously as a prisoner every day." A slight intercourse with the insane in hospitals must satisfy one that all the comforts they have in their captivity, including games and so-called amusements, are but a miserable compensation for their entire loss of liberty.

Dr. M., it is to be recollected, has himself been a superintendent of an insane asylum, and speaks from ample experience of many years. He thinks the discomforts of these institutions, even the best, are not sufficiently considered; apart from the imprisonment—especially the associations which the insane experience in an asylum where all sorts and conditions of madness are congregated together, harrowing scenes of which they are unwilling witnesses, the vulgar tyranny of ignorant attendants, which is unavoidable in large asylums, and the thousand other unpreventable miseries of asylum life—Dr. M. thinks that the superintendents of asylums are apt to be blinded to the demerits of the system, and in the pride of success of organization, classification, etc., to overlook the numerous evils inseparably connected with it.

The system of placing the pauper insane in private families in Scotland has been tried for several years past, as shown by the reports of the Scotch Deputy Commissioners in Lunacy, and has proved very successful. A few years ago, it is stated, their persons were in a wretched state, neglected and ill-treated in many cases, but that now all this is changed; that by the powerful agency of official instruction and inspection, systematically exercised, all who have to do with them have been penetrated with more enlightened views, and the condition of their charges has accordingly been immensely improved, and now leaves little or nothing to be desired; and what has been done in Scotland can be done here. Besides, the experience of the Scotch Lunacy Board shows that many pauper patients are well taken care of in private dwellings at less than one-half what the cost would be in a county asylum. The condition of the numerous insane Chancery patients in England, who live in private houses, is said to be eminently satisfactory, much more so than it could be in the best asylum, and the same is said to be true of many other single patients living in private families; especially in the village of Hanwell and its neighborhood.

In conclusion, Dr. M. is persuaded that future progress in the improvement of the treatment of the insane lies in the direction of lessening their sequestration and increasing their liberty. Many chronic insane, incurable and harmless, will be allowed to spend the remaining days of their sorrowful pilgrimage in private families, having the comforts of family life, and the priceless blessing of the utmost freedom that is compatible with their proper care. The one great impediment to this reform at present undoubtedly lies in the public ignorance, the increasing fear, and the selfish avoidance of insanity. When knowledge is gradually made to take the place of ignorance, and familiarity banishes the horror bred of ignorance, then will a kindly feeling of sympathy for the insane unite with a just recognition of their own interests, on the part of those who receive them into their houses, to secure for them proper accommodation and good treatment; then also will asylums, instead of being vast receptacles for the concealment and safe-keeping of lunatics, acquire more and more the character of hospitals for the insane, while those who superintend them, being able to give more time and attention to the scientific study of insanity, and to the means of its treatment, will no longer be open to the reproach of forgetting their character as physicians, and degenerating into mere house-stewards, farmers, or secretaries.

THE PHYSICIAN'S VISITING LIST FOR 1868. Phila. : Lindsay & Blakiston.

THIS convenient pocket companion at once commends itself to our notice for its simplicity of arrangement. The publishers have exhibited admirable judgment in the omission of various details, which tend to encumber rather than add to the value of vade-mecums of this kind.

ELEMENTS OF MEDICAL CHEMISTRY. By B. HOWARD RAND, Prof. Chemistry in Jefferson Medical College. Phila.: T. Ellwood Zell & Co. 1866. Pp. 399.

THE volume before us is a "multum in parvo," and well adapted for the needs of the medical student. The definitions are models of pith and brevity, and the book as a whole meets with our approval, especially for the happy manner in which general principles of chemistry, as applied to medicine, are discussed.

MICRO-CHEMISTRY OF POISONS, including their Physiological, Pathological, and Legal Relations, adapted to the use of the Medical Jurist, Physician, and General Chemist. By THEO. G. WORMLEY, M.D., Prof. of Chemistry and Toxicology in Starling Medical College, and of Natural Sciences in Capital University, Columbus, O. With 78 Illustrations upon Steel. New York: Baillière Bros. 1867. Pp. 668.

THE title of the work will give our readers a fair idea of its contents, but as to the nature of these contents it becomes our duty to speak. The volume is of such a size, and the subjects treated of so numerous, that we cannot in the space allotted us give it a full review. Yet we hope that in this necessarily brief notice we shall do it that justice which its intrinsic merit deserves.

The subject of poisons will always be an interesting one to medical men, and any work that is specially calculated to unravel the mysteries which hang over the commission of the most atrocious of all crimes, should be and will be held in special esteem as a positive and important addition to our already too scanty knowledge of toxicology. The only popular works that we have heretofore had upon this particular department of medical science have been those of Taylor and Christison, which are both excellent of their kind, but so far do they fall short of the treatise in question, as regards its particular design, that hereafter it must be considered the authority in the English language. With an industry that has been untiring, and a perseverance truly remarkable, the author gives us in this volume the results of the most elaborate and careful investigations into the nature of most of the known poisons, bringing to his aid the microscope to help him beyond the sphere of the mere analyst, thus enabling him to discover the existence of poison in the 100.000th part of a grain. While he gives to us all that has heretofore been known practically concerning the detection of poisons, mineral and vegetable, he has added many other original investigations which, considering the care that has been taken in carrying them out, give them an immense value, and stamp them rightly with the unquestionable reliability of scientific accuracy. At first the author tells us that his idea was merely to present the results of his studies in the micro-chemistry of poisons proper, but wisely reconsidering his original intention, he has given besides a more or less complete treatise upon toxicology proper, embodying under each appropriate head, the symptoms, treatment, post-mortem appearances, and reactions of the different poisons.

In the appendix we have some seventy-eight superb illustrations upon steel, of the microscopical appearance of different toxic agents. These were faithfully traced by the skilful hand of his wife, who, for the sake of doing her part of the work, studiously set about to master the art of steel engraving. In point of artistic finish and minuteness of detail, we have never seen anything to equal these truly beautiful plates, the excellences of most of which are only appreciable with the aid of a magnifying lens. As a reward for the faithful performance of such a task, the author has, with singular good taste, dedicated the work to her to whom he owes so much. In addition to this, there is a valuable tabular statement of the reactions of the different poisonous alkaloids.

The great value which this work will possess to the medical jurist, the toxicologist, the general chemist, and the lawyer, will be the knowledge that it has been prepared by a most earnest worker, an accurate observer, a practical chemist, and a skilful microscopist, for such, at least, we have reason to judge him to be after a careful study of his masterly work.

CHEMISTRY. By WILLIAM THOMAS BRANDE, D.C.L., F.R.S., L. & E., of her Majesty's Mint, Member of the Senate of the University of London, etc., etc.; and ALFRED SWAINE TAYLOR, M.D., F.R.S., Fellow of the Royal College of Physicians of London, and Professor of Chemistry and Medical Jurisprudence in Guy's Hospital. 2d American Edition, thoroughly Revised. Phila.: H. C. Lea. 1867. 8vo., pp. 764.

THERE are so many excellent works on chemistry now before the public, that it is hard to say which one of them has most claims for favor. The one before us, which is the joint labor of two of the greatest minds in Great Britain, can most certainly demand for itself the highest rank in the special department of which it treats. Although a work of large size, being an octavo of over seven hundred pages, it is filled with such subjects as are useful to the student of every-day chemistry, or to the practical man who measures the utility of every scientific fact in proportion to its capability of being demonstrated. In other words, it is calculated in our opinion to give to the medical man the broadest possible ground-work for the study of chemistry, and the application of its great truths to the every-day necessities of practical life. Nothing more is attempted, and nothing more is needed, in a work specially designed for medical practitioners and stu-

dents. The very rare substances which are only met with in the laboratory of the professor or the cabinet of the amateur, are wisely ruled out, and their places occupied by accounts of more useful, because more common substances. The work has been thoroughly revised by Prof. Taylor, upon whom, by the recent death of his colleague, the whole labor has necessarily fallen. The old systems of nomenclature are adopted, and everything is done in the work to make the road, difficult in all cases to the acquisition of true knowledge, as easy and as gradual as possible.

A Treatise on Emotional Disorders of the Sympathetic System of Nerves. By William Murray, M.D., M.R.C.P., Lond., Physician to the Dispensary, etc., etc. New York: A. Simpson & Co. 1867. 8vo., pp. 95.

The subject treated of by our author is rather a novel one, and he deserves, at least, the thanks of medical practitioners in general for dressing up old facts in new garbs, and explaining by a very plausible theory the relations of mind to matter. He charges, with a fair show of reason, most of the mischief in the shape of morbid emotions, to the agency of the great sympathetic. His remarks upon the influence of emotion in producing disease on the one hand, and as the result of disease on the other, are not, it is true, very new, but they are of so practical a character, and the facts are so suggestive and significant, that the author, it seems to us, has been fully justified in writing such a book. His style is concise, pleasant, and frank, while the number of illustrative cases that are scattered through the *brochure* seems to impress indelibly upon the minds of his readers the facts he wishes to bring out. We are sorry, however, to see this otherwise excellent book marred by such a number of typographical errors, showing inexcusable carelessness in proof-reading.

Correspondence.

THE LIQUOR ZINCI CHLORIDI IN GONORRHŒA.

To the Editor of the Medical Record.

Dear Sir—I am not quite sure that I understand the ground upon which my good friend, Dr. Batchelder, takes me to task in your issue of October 15, in a communication with the above heading. It cannot be for the reason that I have called the chloride of zinc a caustic, since it is commonly so regarded, and not to call it so might even be looked upon as "singular." I suppose, therefore, that Dr. B. refers to my statement as to the strength of the solution of this agent which he is in the habit of using in the treatment of gonorrhœa, especially as I could never understand how his patients always got well under so strong an injection as he employs, while mine often could not bear it at all. Since this matter (not puriform, but merely serous) *is not personal* either to the Doctor or myself—for I could never have any personal difficulty with a man whom to know is to honor and respect—and since there are one or two points of practical interest involved, you will perhaps allow me space for a brief reply.

The statement in my work on Venereal Diseases, to which Dr. Batchelder takes exception, is the following: "Dr. Batchelder dissolves 3 ij. of the chloride (of zinc) in 3 iij. of water, and directs the patient to commence with three drops of the mixture to a tablespoonful of water, and inject three times a day; to add a drop at a time (rarely exceeding eight drops) until a smarting sensation is produced, and then gradually to diminish the strength until the discharge disappears." This statement, my friend says, is "a most singular mistake or misunderstanding in regard to my (his) use of the chloride of zinc."

Now, you know, one naturally does not like to be accused of mistake or misunderstanding when one knows he is right; so you will pardon my saying that the above statement was written down one evening, some ten years ago, directly after I heard it from Dr. B.'s own lips, at a meeting of the New York Medical Association, when, with pleasure and profit, we younger members used to listen to the results of his mature experience. This very note is now before me, including Dr. B.'s remarks upon the treatment of bubo by his favorite remedy, compressed sponge, and of swelled testicle by an emetic of tartarized antimony and the local application of mercurial ointment.

But, from fear that some will-o'-the-wisp might have transmogrified my notes during the ten years they have been lying on my shelf, I have to-day borrowed the volume of records of the New York Medical Association, from the present Secretary, my friend Dr. A. E. M. Purdy, and I find there abundant testimony that my estimate of the strength of the solution employed by Dr. B. is, if anything, below the average statement made by himself in several communications to the society. Thus, at the session of February 11, 1856, when the treatment of gonorrhœa was under discussion, Dr. B. is reported by the Secretary, Dr. Leaming, as saying that "he uses the chloride of zinc and distilled water *equal parts*, and eight (8) drops of this solution to an ounce of water" as an injection.

But this evidence is superfluous, since Dr. B. confirms my statement in the very communication to your journal in which he calls me to account; with this exception, that the injection he now uses, viz., six drops of the liq. zinci chloridi to the ounce of water, is one-tenth stronger than the one I quoted!

Several years ago, at my request, Prof. P. W. Bedford, of the College of Pharmacy, made a careful estimate of the specific gravity and number of grains of the chloride in each fluid drachm of the liq. zinci chloridi, for the purpose of facilating the writing of prescriptions for dilutions of this fluid. The same gentleman has made a similar examination of a solution of two drachms of the chloride of zinc in three drachms of water, and the following are the comparative results:

"The liq. zinci chloridi, as sold by Dr. Squibb, has the sp. gr. 1.56. A fluid drachm weighs eighty-eight and one-half grains, and contains forty-four grains of anhydrous chloride of zinc. *Drops are totally unreliable*, and may vary from one hundred and fifty to fifty-eight to the fluid drachm; but it is safe to estimate them on the average at sixty-four (the result of twenty trials). Hence six minims or six drops may be calculated to contain four and four-tenths grains.

"Again, if two drachms of chloride of zinc be dissolved in three drachms of water, we shall have a solution measuring three and three-fourths fluid drachms, with a sp. gr. of 1.41. Each fluid drachm weighs eighty grains, and contains forty grains, or every six drops four grains, of anhydrous chloride of zinc. Hence this solution is one-tenth weaker than the liq. zinci chloridi."

When, therefore, my venerable friend says that his "injection in gonorrhœa is simply six drops of the liquor zinci chloridi to an ounce of water," he simply says that his injection is one-tenth stronger than if he used three drops of a solution consisting of zinci chloridi 3 ij. and aquæ 3 iij., to half an ounce of water. Q. E. D.

Mr. Milton, who appears to have tested the efficacy of various caustics and astringents in the treatment of gonorrhœa with a great deal of care, assigns to the chloride of zinc a position inferior to that of the sulphate and acetate; and such, as a general rule, has been my own experience, although in some exceptional cases the chloride will succeed when the sulphate and acetate fail. I have not usually been able, however, to use so strong a solution as that recommended by Dr. Batchelder.

In closing, I would merely call attention to the uncertainty and inaccuracy of prescribing drops instead of minims.

Very truly yours,

F. J. BUMSTEAD.

162 West Twenty-third street, Oct. 22, 1867.

THE COLLEGE COMMENCEMENTS, PHILADELPHIA.—THE PHYSICIANS AND APOTHECARIES.

(FROM OUR OWN CORRESPONDENT.)

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—On Monday, 14th ult., the sessions began in the medical colleges of this city. At noon the introductory at the University of Pennsylvania was delivered by Prof. LEIDY in a brief, practical address, detailing the method of tuition pursued at the institution, and giving the students some excellent suggestions as to the manner of study. The importance of attendance upon clinical instruction was pointed out, and the advantages of an acquaintance with French and German were prominently set forth. At half-past seven in the evening, the general introductory at the Jefferson Medical College was delivered by Prof. Gross. This was anything but a brief address, but the subject selected was one so extensive as to preclude the possibility of brevity in doing it justice. The changes which had taken place in practice, and the improvements which had been made in the science and art of medicine since the lecturer's first entrance into the profession, and embracing a period of forty years, was the main subject presented. The audience upon each occasion was very large, and at the more convenient evening hour the room was literally packed, numbers standing at the entrance for whom there was no accommodation inside. It is impossible to judge from the attendance upon an introductory of the number of students present in regular attendance, as members of both classes attend indiscriminately, as well as graduates and friends of the institution. It is believed, however, that the classes are fully equal to the numbers of last year.

The subject of the reciprocal duties between physicians and apothecaries was discussed at several meetings of one of our medical societies, previous to their annual adjournment over the summer months, and it is again receiving considerable attention. Many grievances, on the part of a certain class of apothecaries in this city, have been gradually accumulating for years, until at length physicians are compelled to concert some measures of relief for their own protection. An indisposition to move actively in the affair, and a dislike to be the first one to make the movement, has long held each one back, but the matter is now being discussed in earnest, and it is to be hoped that the result will be satisfactory.

It is not only that apothecaries' stores have become, in many instances, degraded into confectionery, stationery, perfumery, and dram shops, but that the proprietors of these establishments are taking upon themselves certain functions of the physician which were not surrendered to them when he abandoned the preparation of his own prescriptions. Such are, prescribing for the sick and thereby diverting from the physician a portion of his livelihood; the substitution of one ingredient for another in putting up prescriptions; the criticism of prescriptions before patients; the appropriation of the formula of a physician, and the vending of the remedy, either privately or by advertisement, as a proprietary medicine. These, and other abuses, as the exposal for sale of such remedies; the renewal of prescriptions against the wish of the prescriber; the recommendation of one physician to the detriment of another who is in attendance upon the case, etc., are calling for some method which shall remedy the evils complained of. One plan strongly urged, is to patronize only such apothecaries as restrict their business to the compounding of prescriptions and sale of drugs. There are a number of trustworthy pharmaceutists who are at present compelled, by the press of competition, to offer for sale certain family medicines, and perhaps otherwise transgress their proper limits, who, if assured of the support of practitioners, are willing at once to abandon all the practices complained of. It is therefore recommended by some physicians that such concerted action be made general, and that every prescribing apothecary be prosecuted for practising without a license, and that all apothecaries vending secret remedies or quack medicines be declared unworthy of confidence in the compounding of prescriptions. Whether anything will be done remains to be seen. Physicians have it in their power to correct these abuses if they will act together, and the best method of doing so is to make up their minds to direct their patients to such pharmaceutists only as confine themselves to a legitimate prescription business. Should any action be taken by the society which is now agitating the matter, they will doubtless invite the coöperation of the other medical societies and the profession at large in the city. If anything definite is determined upon I will inform your readers of it, unless, indeed, some objection to publicity be made, which is not unlikely to occur.

Yours truly, C. J.

Philadelphia, Nov. 1, 1867.

CREASOTE FOR BURNS.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—We are surprised to find creasote as an application for burns referred to in several of the journals as a new thing. It has, for several years, been so generally and successfully used in this city, both in hospital and private practice, that we supposed its value was more extensively known. If we were mistaken, let us add our testimony to its merit. We dilute the creasote with water till the mixture has but slight milkiness remaining; or, to be more exact, ℞. Creasoti ʒ iij.; aquæ font. Oj., M. In dressing burns it is of great importance to the patient's comfort that the strips of old linen or cotton, by means of which the application is made, should not be more than two inches wide—that they may be renewed successively without disturbing a large surface at once. Yours truly,

J. H. HOBART BURGE.

60 Court Street, Brooklyn.

A THEORY REGARDING THE CAUSE OF PHOSPHORESCENCE.—A French savant has propounded the theory that phosphorescence is due to the emission of light previously absorbed. He finds that porous substances that have been exposed to light have a decomposing action on salts of silver, when placed in contact with them in the dark.

New Instruments.

A NEW PESSARY.

By M. S. BUTTLES, M.D.,

ADJUNCT TO CHAIR OF OBSTETRICS, AND PRELIMINARY LECTURER ON GYNÆCOLOGY, IN UNIVERSITY MEDICAL COLLEGE, NEW YORK.

In the Medical Record of August 1, 1867, mention is made of a pessary exhibited by me at a meeting of the East River Medical Association.

Since then I have been so frequently interrogated by members of the profession (some having very erroneous and almost ludicrous ideas) in regard to its use, that I have thought it best to make known, in a few words, some of the advantages of this instrument, with directions when and how it is to be used. In the first place we wish to state that we do not make the subject of pessaries our hobby, and ride it to death; but that they are sometimes of use, no enlightened physician will pretend to deny.

Recognizing the principle that the uterus is mainly supported by the vagina and muscular tissues of the pelvis, it is easy to see why a foreign body introduced into the vagina ought to be supported in the same way. The uterus is a cone with the apex down; the contractility of muscular tissue and coaptation of the soft parts tend to slide the uterus up in the pelvic cavity; should the base of the cone be placed down, the same cause would very soon force the organ into the external world.

It is upon this principle that we have constructed the "conical pessary." It is made of hard rubber, and may be bent to any curve by simply oiling and passing through a flame until it becomes softened.

Fig. 1.

Fig. 2.

The accompanying cuts will convey an idea of its shape better than I can explain. Figure 1 represents a front view, while figure 2 shows its relation to the uterus in cases of prolapsus, retroversion, and retroflexion, the base being in the posterior vaginal *cul-de-sac*. In cases of anterior displacements, the base of the instrument should be placed anterior to the cervix uteri, and in all cases the apex should float loosely in the vagina (sometimes being visible at the vulva) so as to participate in the downward movement of the uterus when the patient coughs or strains.

It is a great mistake to attempt the support of the uterus by a dead pressure, especially if there exists the least inflammation or irritability of the organ. There is nothing like nature's support—the soft parts.

We have been informed of a case where the instrument was introduced with benefit by placing the apex in the posterior *cul-de-sac*, and the base against the inner surface of the ascending rami of the pubes. This was done by a very highly educated physician of this city, who has attained considerable eminence as a gynæcologist, and one for whose judgment we have the most profound respect.

If the instrument is introduced in this way it does not act on the principle upon which it was constructed, and falls short of what is designed.

What we claim for this pessary is, that it brings into play the natural supports of the uterus, and can be worn by the patient when other instruments cannot; that it is more effectual in keeping the organ *in situ;* that where congestion and irritability exist as the result of displacements, it is not always necessary to treat the uterus before introducing it, and removing the cause.

It may be used with great benefit in the anterior displacements; but experience shows that it is more effectual in cases of prolapsus, and eminently so in posterior displacements.

In justice to our friend, Dr. James E. Steel, we will state, that while conversing with him, some two years ago, we gained an idea which contributed in a measure to the result of this invention.

New Publications.

The Physician's Handbook for 1868. By William Elmer, M.D. N. Y.: W. A. Townsend & Adams, 1868.

Hysteria, etc. Six Lectures delivered to the Students of St. Bartholomew's Hospital, 1866. By F. C. Skey, F.R.S., etc. N. Y.: A. Simpson & Co., 1867.

Lectures on Diseases of Women. By Charles West, M.D., Fellow Royal College of Physicians, etc. Third American from third and revised English Edition. Philadelphia: H. C. Lea, 1867.

Medical Items and News.

Address before Alumni of University.—Professor George T. Elliot will deliver an address before the Alumni of the Medical Department of the University, on Friday evening the 22d inst., at 8 o'clock, in the large chapel of the University on Washington square. The profession generally are invited.

The "Howard Ambulance."—A recent letter from Baron Larrey announces the awarding of the silver medal to Dr. Benjamin Howard, of this city, by a unanimous vote of the International Council, and requests drawings and descriptions, which may be laid before the Academy and the Army Medical Boards by the Inspector-in-Chief of the Medical Deparment of the armies of France.

Long Island College Hospital.—Prof. Jos. C. Hutchison has resigned the chair of Surgery, and Prof. E. N. Chapman that of Obstetrics, in the Long Island College Hospital.

Surgeons to the Queen.—Sir W. Fergusson has recently been appointed Sergeant Surgeon to the Queen, and Mr. Paget, Sergeant Surgeon extraordinary.

Assistant-Surgeon James M. Flint, U. S. N., has been detached from the Pensacola, and is waiting orders.

Dr. Marion Sims has been honored by the King of Italy with the title and insignia of Knight of the Order of St. Maurice and St. Lazarus. He is now also Commander first-class of the Order of Isabella la Catholique.

Dr. Alfred O. Treat has sailed from New York *via* California as missionary-physician to Pekin, China.

Dr. Levi Folsom died in this city, October 25, ult., aged sixty-four years, ten months, and twelve days.

RECENT APPOINTMENTS IN THE U. S. ARMY MEDICAL DEPARTMENT.—Drs. Samuel H. Orton, A. B. Campbell, John N. Randall, W. J. Wilson Jenkins, A. Fitzgerald, Peter Moffat, Charles Styer, Joseph H. T. King, Joseph K. Corson, Alfred Delano, W. H. H. Michler, Daniel Weisel, and Peter J. A. Cleary.

DR. D. TILDEN BROWN has been appointed Professor of Psychological Medicine and Medical Jurisprudence in the College of Physicians and Surgeons in this city.

DR. THOMAS N. GETTY, Brevet Lieut.-Colonel, U. S. A., Post Surgeon at Fort McHenry, Md., died, aged about fifty years, on Oct. 30th, ult. His original commission as Asst.-Surgeon bears date Nov. 23, 1849. Until within a short time since, Dr. Getty filled the position of Medical Director of the Department of the South.

DR. E. M. SHAW, also of the army, was killed in an attack by Indians upon a stage near Soda Lake, Arizona, October 17th, ult.

DR. JOHN M'GREGOR, late surgeon in a Connecticut regiment, and recently of Thompson, Connecticut, was thrown from his carriage on the afternoon of Nov. 4th, ult., on Dyer Street, Providence, R. I., in consequence of a collision with a freight car drawn by horses. He was run over, and sustained a comminuted fracture of the left arm, which necessitated amputation at the shoulder-joint. He died within three hours after the accident.

DEATH OF JOHN D. MURPHY, PASSED ASST.-SURGEON, U.S.N.—A telegram has been received, announcing the death of Passed Asst.-Surgeon John D. Murphy, U.S.N., at Pensacola, Fla., of yellow fever. Surgeon Murphy entered the United States service November 5, 1861, and was promoted to Passed Asst.-Surgeon, January 24, 1862, being at the time of his death the first for promotion to full Surgeon. During the war, Dr. Murphy saw much active service, being present at the following engagements: Passage of Forts Jackson and St. Philip and capture of the Chalmette batteries below New Orleans, April, 1862; first attack on Vicksburg, June 28, 1862; encounter with the rebel ram *Arkansas*, July 15, 1862; siege and capture of Port Hudson, during which Dr. Murphy was on shore with the battery of nine inch guns from the *Richmond;* skirmish at Mississippi City, March 8, 1862; both attacks on Fort Fisher, N. C. Dr. Murphy was ordered from the naval hospital, N. Y., in the early part of the present year to duty at Pensacola, where his duties have for a long time compelled him to battle with the epidemic to which he finally succumbed. Dr. Murphy stood well in his profession, and his death will be deeply felt by his friends and the service generally.—*Army and Navy Journal*, Nov. 2. [Dr. M. died Oct. 23d ult.—ED.]

THE NEW GERMAN HOSPITAL now being built in Seventy-sixth street, this city, has realized quite a handsome sum—the proceeds of a vocal and instrumental concert at Washington Hall, Morrisania, N. Y. This institution is still somewhat crippled for means, and eminently deserves a recognition of its claims upon the public.

PORTS DECLARED INFECTED.—The Metropolitan Board of Health has adopted a form of proclamation declaring the following Southern ports infected until Nov. 21st: Galveston, Lavacca, Corpus Christi, Indianola, New Orleans, Mobile, Key West, Pensacola, and St. Augustine.

DISAPPEARANCE OF THE CHOLERA FROM PALERMO.—Our Consul at Palermo, under date of October 1, says: The cholera epidemic has entirely ceased in this town, there having been no new cases since the 22d of September last. For the past six days the health officers have issued clean bills of health. The actual number of deaths during the epidemic, as well as I have been able to ascertain, was 4,776 in the city proper, and some 700 or 800 in the neighboring villages. Business is slowly reviving.

DARWIN'S THEORY OF THE ANIMAL SCALE.—Professor Bischoff, of Munich, has recently received numerous skulls of orang-outang, chimpanzee, and gorilla, and comes to the conclusion that Darwin has failed to prove the ascent of man from the monkey.

A LIBERAL LONDONER.—A wealthy Londoner, name not mentioned, has given £250,000 for the erection of a convalescent hospital in London.

DOCTORS CONNECTED WITH THE PUBLIC PRESS.—Twenty-five doctors, all of whom have some time practised medicine, are at present responsibly connected with the New York press.

POPULATION OF GREAT BRITAIN.—Great Britain now contains thirty millions of people, an increase of two and a half millions since 1852, and during the time she has furnished three millions of emigrants to this country, Australia, and other parts of the globe. During the last fifteen years, Ireland has decreased in population nearly eight hundred thousand.

AMONG our French exchanges is a new medical journal which has recently appeared at Paris, and is edited by Professor Piorry. This new medical periodical bears the name of the *Evénement Médical*, and is decidedly an event in the scientific periodical literature of the day. Professor Piorry has at present attained to an advanced age in years and in the memory of the profession. His skilled diagnosis in the clinical wards of his hospital, his lucid expositions of obscurely revealed symptoms of the most perplexing forms of disease, have rendered him preëminently distinguished as a diagnostician. His name will live in history associated with the names of Auenbrugger and Corvisart, and as having contributed largely in practical benefits to our knowledge of the pathology of the interior organs of the body. We sincerely and most cordially greet the appearance of this new journal. The learned professor is a candidate for one of the vacant places left by the death of Rayer and Velpeau. Bonne chance à l'auteur de "Dieu, l'Ame et la Nature."

NEW YORK SOCIETY FOR THE RELIEF OF THE RUPTURED AND CRIPPLED.—During the month of August last, five lots of ground (125 by 100 feet) have been purchased, on the northwest corner of Lexington avenue and Forty-second street, for the purpose of erecting thereon a hospital for the surgical treatment, and education whilst under treatment, of crippled children—many of whom will be detained three or more years for cure. There will also be a department for the treatment of out-patients, furnishing them with surgico-mechanical appliances, and keeping the apparatus in repair whilst under treatment. All this will be free of charge to the indigent; and to those able to pay, a charge will be made to meet their circumstances when so desired. The amount received from patients is handed to the Treasurer of the Society, and contributes to the support of the Institution.

In our present very limited sphere the labors have been as follows:

The number of patients treated the first year was 828; the second year 965, showing an increase of sixteen per cent.; the third year the patients numbered 1,489, or an increase of fifty-four per cent.; and during the fourth year, ending May 1st, there were 1,684 cases, which is equivalent to thirteen per cent.; and the whole

number who had received the benefits of the Institution up to that period was 4,966.

These figures are important and significant. They show, that as the Society grew in public knowledge and favor, there was a large and rapid increase of cases. In the fourth year, however, the increase was only thirteen per cent. over the preceding. This was not owing to a paucity of cases, for of these there was a steady increase, but to the Society's inability to receive or treat a greater number without enlarged means and accommodations.—*Extract from Remarks of Dr. James Knight at the Collation of the N. Y. County Medical Society.*

Death Statistics of the Sexes.—In a paper by Mr. W. L. Sargant, on the vital statistics of Birmingham and seven other large towns in England, results are arrived at different in some respects from those commonly received. Thus, whilst admitting that there are more male deaths on the whole than female, the author states that "in the first five years of life there is a large excess of male deaths; that from five to ten years of age the male excess is very small; that from ten to fifteen the male excess is decided, but at fifteen the tide turns, and until twenty the female deaths are largely in excess; that from twenty to thirty-five the male and female deaths are equal; and then after thirty-five, the male deaths are again in excess. Mr. Sargant adds in a note the "singular fact" obtained from Mr. Makeham, who is such high authority in vital statistics, "that among the *males* of the upper classes, from the age of sixteen to that of twenty-three, the annual rate of mortality rises rapidly from about eight to a maximum of fifteen per thousand, after which it gradually diminishes." It cannot but be desirable and interesting to ascertain the cause or causes of this state of things.

To the Generous Members of the Profession.—Dr. Mong-Shaw-Loo, a native of India, who has been in this country nearly ten years, obtaining an education, and is now a graduate of Lewisburg College, Pa., and of a medical college in Cleveland, Ohio, where he was a student of Dr. Gustav C. E. Weber, is about returning to his native land. Any of our readers who have books or surgical instruments, or apparatus, that they can dispense with, would do a worthy act to a worthy man by forwarding them to this office [115 S. Seventh street]. Dr. Mong-Shaw-Loo will need them in imparting instruction to others in India, where the field is extensive and the laborers are few.—*Phila. Med. and Surg. Reporter.*

Assignments in the U. S. Army Medical Department.—A special order has been issued from the War Department, directing the following newly-appointed Assistant-Surgeons to report for duty as hereinafter indicated: A. B. Campbell and J. H. T. King, to the Medical Director, Department of Dakota; Daniel Weisel, to the commanding officer of Fort McHenry, Maryland; P. C. A. Cleary, to the Medical Director, Department of the Cumberland; W. H. H. Michler, to the Superintendent of West Point, New York, temporarily; John N. Randall, J. K. Corson, and Alfred Delaney, to the Post Surgeon of the principal recruiting depot, Fort Columbus, New York harbor.

Officers of the East River Medical Association.—The following were elected at the Anniversary Meeting of the above Association: President, Dr. John Burke; Vice-Presidents, Drs. William Newman and Robert A. Barry; Secretary, Dr. William J. Purcell; and Treasurer, Dr. Truman Nichols.

Yellow Fever in New Orleans, La.—The New Orleans Board of Health, Nov. 5th, ultimo, after paying a high tribute to the Howard Association in recognition of their disinterested services, declared yellow fever no longer an epidemic The total number of deaths up to above date was 3,006.

Consultations with Homœopathists.—The articles which have appeared in the New York papers lately on this topic, forcibly illustrate how little the public understand the motives which induce medical societies to oppose such a practice. One journal, which is always loud in its claims to liberality and fairness, tells us we do not understand our position—that such opposition is *unphilosophical.* Let us see how this charge stands.

If Mr. Field, when he wished to lay the Atlantic cable, had called to his aid the spiritual media who claim to be able to move matter without human agency, and asked their advice and assistance in the matter, would he have been a philosopher or a fool? If the surgeons in India were to solicit in their cases the powers of the school of native doctors, who cure exclusively by charms and amulets—the Saat, we believe they are called—would they be acting in an eminently philosophical manner? Yet these latter unquestionably are well educated, and tolerably successful; and very intelligent and honest folks have implicit faith in "physical manifestations." To act philosophically, is simply to act in accordance with common sense. There would be no sense or honesty either in advising with a person as to hanging a charm around the neck of a man, when we believe it will have no effect at all—or, if any, merely through his faith in it. To do so would be to encourage an error or a deceit.

Just so with the infinitesimal doses. We firmly believe they are all inert. To consult, therefore, which of them to give, is hypocrisy or knavery—no moderately honest man would do it; one who is openly dishonest has no business in a reputable medical society. If any believe the doses are not inert, and yet cannot subscribe to the "Law of the Similars," such consultations are equally vain, and equally unphilosophical. The wonder is, why any can be found in either camp to court such foolish and aimless interviews.—*Phila. Med. and Surg. Reporter.*

The Cholera at the U. S. Naval Rendezvous, near Philadelphia, has happily been brought under control. The type was pronounced virulent, and the sick men were transferred from the *Potomac*, the receiving ship on board of which it first appeared, to the double-ender *Sassacus*, which was converted into a hospital ship. The first death occurred on board the former ship, which is now dismantled and undergoing purification, October 19th, ult. Surgeons Lowber, King, Wales, Nelson, and Denby, Past Assist.-Surgeon Hutchinson, and Assist.-Surgeons Drennan, Frank, and Hawks, were on duty during the prevalence of the malady.

Births in Vienna.—According to the statistics of last year, the illegitimate births in Vienna exceeded the legitimate by one thousand.

Arrival of Immigrants at this Port.—The statement of the Commissioners of Emigration shows that during the year ending October 30, 1867, 208,428 immigrants arrived at this port.

Suicides.—The London *Athenæum* directs attention to the Registrar-General's curious return of the number of suicides in England during the eight years from 1858 to 1865. They average 1,300 annually, and to every million of the population run thus in each successive year: 66, 64, 70, 68, 65, 66, 64 and 67. Hanging has always been the death generally adopted by suicides, 28 out of the ratio of 67 per million suicides falling under

this head. After hanging follow cutting, stabbing or drowning, poisoning and by firearms. The ratio of suicides per million of the respective population in 1864 was 110 in France, 64 in England, 45 in Belgium, 30 in Italy, and 15 in Spain.

Singular Superstition in England.—"Going into a neighbor's house in Madely, one day last week, I found one of the children suffering from severe cough, and expressed my opinion that it was a case in which medical assistance should be obtained. The father of the boy agreed that it was very bad, but said that before calling in a doctor he intended to try a cure that he had long used in similar cases, and never found to fail. On being pressed to communicate the prescription, he gravely informed me that the charm consisted in cutting a few hairs from the part of the patient's head where it joins the neck, placing them between two thin slices of bread and butter, and giving them to a dog. If the sandwich took no effect on the animal the patient would recover; but if the dog sickened the case was critical, and a doctor should be called in forthwith."—*Pall Mall Gazette Correspondent.*

Poisoning by Phosphorus.—M. Dybkowsky, in a recent memoir, states that the poisonous action of phosphorus is entirely due to the formation of phosphoretted hydrogen gas, which, in passing into the blood, rapidly combines with the oxygen present. Hence that death from phosphorus is nearly he concludes equivalent to death by asphyxia.—*Med. and Surg. Reporter.*

Making Sea-Sand Productive.—Another experiment has been made in England to ascertain the effect of sewage manure upon sea-sand, which, according to Liebig, would never yield a crop. The metropolitan sewage company became tenants of ten acres of land at Barking, upon which bricks had been made. On one acre of the ten, 4,000 loads of the Maplin sands were spread to the depth of two feet. On this grass and wheat were sown, with an admixture of the sewage, and the result was a healthy and productive crop. This year the whole of the ten acres, for which the company paid £1 an acre, is all laid down in grass, and has been re-let to a London dairyman at £13 10s. the acre, the company supplying their tenant with sewage to the amount of 50s. per acre.—*N. Y. Evening Post.*

A Medical Examination in Ireland.—A contributor who has himself been one of the fortunate candidates, sends us the following interesting item:

"The examination for the diploma of the Royal College of Surgeons in Ireland is looked forward to by the students of the Dublin Medical Schools as an ordeal demanding from the candidate not only an intimate acquaintance with professional subjects, but a considerable amount of fortitude and self-possession for the occasion. Before he can present himself for the final examination, the student is arraigned before the Court of Examiners in classics, in order to satisfy the College that he has received a suitable preliminary education; but this step may be taken at any stage of his professional studies. Having attended the prescribed courses of lectures and sessions of hospital practice, he makes application for 'letters testimonial,' and when his turn has come round he presents himself in the building of the college to await the pleasure of the Court of Examiners Things have changed in some minor respects since my time, apart from the well-known addition of practical demonstrations in anatomy and surgery, and the answers in writing now required from candidates. But I will briefly describe the scene as it presented itself to me some six years ago.

"Arriving at the outer door, under escort of Drs. John Morgan and E. D. Mapother, the celebrated grinders, both now professors of the college, with a few friends who had already been through the mill, and a *posse comitatus* of future candidates, the applicant was received by the venerable John Evans, the veteran college porter, who eyed him with an anxious glance, possibly having some connection with the usual fee on delivery of the diploma. After a short interval, occupied by the assembling of the court, a bell was heard to sound, and Mr. Evans, presenting himself at the door of the examination-hall, received the order, 'Bring in the candidate,' and the latter was ushered in by the obsequious John, who pushed the chair well in under him at the table, lest in his trepidation he should lose his balance, and supplied him with a glass of water to relieve any vocal agitation which might arise.

"The candidate now found himself seated at a large round table. Opposite to him he observed Mr. Richard G. H. Butcher, of resection celebrity, President of the Court of Examiners, with a member of the council of the college, and three other examiners on each side to complete the circle. These all retained their respective positions during the examination, and to each of the examiners he was required to give answers distinctly audible to the rest. Fortunately, the remaining audience, consisting of such licentiates of the college as chose to attend, was seated behind the candidate, on tiers of benches at the end of the hall nearer the entrance. He was then examined in succession by each member of the court, the examination continuing for one hour on each of two successive days.

"Among the most trying features of the ordeal was the exhibition by Dr. Jerome Morgan of what poor old Arthur Mitchell used to call the "arcana medicamentorum," consisting of specimens of the materia medica, the name, history, habitat, and properties of each of which were in turn demanded; and the good Doctor seemed well pleased when the fortunate aspirant accurately discriminated between carefully crystallized specimens of Epsom salts, sulphate of zinc, and oxalic acid, and pronounced certain small flakes to consist of the inspissated juice of the momordica elaterium, ecbalium agreste or squirting cucumber, σίκυς αγριος of Hippocrates, commonly found growing wild among the rubbish in villages of Greece and the Archipelago, the specimen being recognized by the impress of the linen on which the feculæ are dried. Various were the questions propounded in anatomy, physiology, practice of medicine, and operative surgery; and Mr. Michael Harry Stapleton (better known to students as 'Baron Larrey,' a sobriquet probably derived from his undisguised admiration of that still more eminent surgeon), inquired into the nature and treatment of common sprains, the different varieties of aneurism and epilepsy, vainly endeavoring to 'take a fall out of' the candidate by suggesting horse exercise as a prophylactic in the latter disease.

"Towards the close of the second *séance*, the candidate was accosted by the still small voice of Mr. Butcher, requesting him in amiable accents to 'write a prescription for a purgative mixture and read it,' which done he retired to the library, or more frequently just outside the door of the hall, to await the result, which was finally communicated by John Evans in the shape of a piece of paper containing the words, 'The court is—satisfied,' with an ominous blank for the addition of 'not,' which frequently, alas! in less fortunate instances, appeared in half-dried ink like the signature of the President, the remainder having been prepared beforehand. The decision was arrived at by ballot of the examiners, and from it there was no appeal, no alterna-

tive but to return to his studies for the space of six months. The final ceremony consisted in making and subscribing to the following declaration: 'I, A. B., do solemnly and sincerely declare and promise, that I will observe and be obedient to the statutes, by-laws, and ordinances of the Royal College of Surgeons in Ireland, and that I will, to the utmost of my power, endeavor to promote the reputation, honor, and dignity of the said college.'

"There are, in Dublin, several schools of medicine and surgery, and although some of them are under the direction of the authorities of the different colleges, the professors are ineligible to the office of examiners. There are four colleges empowered to grant degrees or diplomas, viz., the University of Dublin (Trinity College), the Queen's University, which has no school in Dublin, but holds its examinations at the vice-regal castle, the Royal College of Surgeons, and the King and Queen's College of Physicians, which has a kind of partnership school in connection with Trinity College. There are, besides, several unchartered schools, which have no direct connection with any examining body, in which students are prepared for the different examinations."

MENTAL LABOR AND PHYSICAL EXERTION.—It may be possible, at some future stage of scientific inquiry, to compute the comparative amount of oxidation in the brain during severe mental labour. Even now, from obvious facts, we must pronounce it to be a very considerable fraction of the entire work done in the system. The privation of the other interests during mental exertion is so apparent, so extensive, that if the exertion should happen to be long continued a liberal atonement has to be made in order to stave off general insolvency. Mental excess counts as largely as muscular excess in the diversion of power: it would be competent to suppose either the one or the other reducing the remaining forces of the system to one-half of their proper amount. In both cases the work of restoration must be on the same simple plan of redressing the inequality by allowing more than the average flow of blood to the impoverished organs, for a length of time corresponding to the period when their nourishment has been too small. It is in this consideration that we seem to have the reasonable, I may say the arithmetical, basis of the constitutional treatment of chronic disease. We repay the debt to nature by allowing the weakened organ to be better nourished and less taxed, according to the degradation it has undergone by the opposite line of treatment. In a large class of diseases we have obviously a species of insolvency, to be dealt with according to the sound method of readjusting the relations of expenditure and income. And, if such be the true theory, it seems to follow that medication is only an inferior adjunct. Drugs, even in the happiest application, can but guide and favor the restorative process; just as the stirring of a fire may make it burn, provided there be the needful fuel. There is thus a definite, although not numerically stateable relation, between the total of the physico-mental forces and the total of the purely physical processes. The grand aggregate of the oxidation of the system includes both; and, the more the force taken up by one, the less is left to the other. Such is the statement of the correlation of mind to the other forces of nature. We do not deal with pure mind—mind in the abstract; we have no experience of an entity of that description. We deal with a compound or two-sided phenomenon—mental on one side, physical on the other; there is a definite correspondence in degree, although a difference of nature, between the two sides; and the physical side is itself in full correlation with the recognized physical forces of the world.—*Macmillan's Magazine for September.*

THE NERVOUS TELEGRAPH.—A French savan has likened the quickness of volition in an animal to the telegraph. He tells his class: When a whale is harpooned, the nerve affected instantly telegraphs to the creature's brain, "Harpoon in tail;" upon which the brain telegraphs back, "Jerk tail and upset boat." What a wonderful thing is science!

EXERCISE AND ITS EFFECTS.—Mr. Archibald Maclaren, in a volume entitled "Training, in Theory and Practice," speaks of the immediate effects of exercise on the muscles most actively engaged at the time. He found the law of development strongly demonstrated in a long pedestrian tour, extending over nearly four months, in which the average per day on foot exceeded nine hours, and usually with a knapsack weighing twelve pounds. During this time the chest fell from 41 to 39½ inches in circumference; the upper arm from 14½ to 13¼; the lower arm remaining unchanged at 12½ inches. The lower limbs, on the contrary, were greatly increased—the calf of the leg passing from 16 to 17¼ inches; and the thigh from 23¼ to 25 inches. Often recorded examples to the same purport are seen in the great development of the legs of dancers and the arms of a blacksmith, etc.

EFFECT OF THE ABSENCE OF SOUND UPON THE MIND AND SENSE OF HEARING.—Dr. H. Ralls Smith, of Louisville, Ky., in the course of certain investigations, has established the truth of the theory that the permanent denizens of the Mammoth Cave are not only without a trace of the optic nerve, but are also destitute of the sense of hearing. Dr. Smith at one time penetrated about four miles into the interior of the cave, and some four hundred feet below the surface of the earth. The effect upon him of the solitude and total absence of sound, he states, was very distressing, and almost insupportable, resulting in a very perceptible, although temporary, defection of hearing and aberration of mind. This explains the fact why persons lost in the cave for one, two, or three days, have always been found, when rescued, in a state of temporary insanity. The mind and special senses, deprived of their natural pabulum and stimulus, gradually become weakened, paralyzed, atrophied, and finally, as far as external manifestations are concerned, nearly, if not quite, extinct. These investigations may afford some clue to the cause of cretinism in the deep gorges of the Alps.

THE ABUSE OF PHYSICAL EXERCISE.—The *Westminster Gazette*, in the course of a declamation against too much physical exercise, sensibly observes: "Those who have gone through the severest training become in the end dull, listless, and stupid, subject to numerous diseases, and in many instances the ultimate victims of gluttony and drunkenness. Their unnatural vigor seldom lasts more than five years. It was especially remarked by the Greeks that no one who in boyhood won the prize at the Olympic games ever distinguished himself afterwards. The three years immediately preceding seventeen are years of great mental development, and nature cannot at the same time endure any severe taxing of the physical constitution. Prudence, therefore, especially at this critical period of life, must ever go hand in hand with vigor, for the evils of excess outweigh by far the evils of deficiency."

SYPHILIS CONTRACTED FROM CIGAR STUMPS.—Two cases of syphilis contracted by chewing cigar stumps picked up in the streets, have been reported in a recent number of the *Giornale Italiano delle Maladie Venere.*

Original Communications.

VESICO-VAGINAL AND RECTO-VAGINAL FISTULES.

By NATHAN BOZEMAN, M.D.,

NEW YORK.

A Vesico-Vaginal and a Recto-Vaginal Fistule in the same case; the former of Enormous Dimensions, through which the Fundus of the Bladder protruded, and made its appearance externally in the form of a large Fleshy Tumor, with both Ureters opening upon its surface—The Rectal Fistule, also of large size, complicated in the lower edge with a broad, hard, and unyielding band, closed at one operation with our Button Suture, by virtue of its protective power against the uncontrolled and poisonous Urine flowing into the Vagina all the while from the Ureters—The Vesical opening treated by transverse or horizontal obliteration of the Vagina, done at one operation with the Button Suture—First successful operation of the kind on record—Remarks.

In the great republic of science no one has the imperial right to authority, it matters not what may be the character of his investigations, further than his superior opportunities, judgment, skill, and success make him so. The bare assertion of a thing, without the necessary proof, at this advanced stage of medical science, fails to give satisfaction, and cannot be accepted by the truly scientific physician and surgeon.

A fair and honest report of cases, therefore, I have always thought was the only way of doing one's self full justice, and enabling others to arrive at satisfactory conclusions regarding the results of any particular branch of practice. So, in 1853, when I first turned my attention to the treatment of some of the injuries incident to parturition, I determined to put upon record every case that presented itself to me, whether successfully treated or not, believing that I would thereby make my experience, as far as it went, available, and thus enable other colaborers in the same field to profit by my mistakes as well as my successes; the only true way, I conceive, of subserving the great ends of science.

As to the correctness of my course, no one, I presume, will gainsay; and when it is recollected that almost every one of the injuries of which we are speaking possesses distinct peculiarities, and calls for a particular modification of treatment, the importance of the matter becomes at once strikingly manifest, and the duty of the surgeon clearly indicated.

My first case of vesico-vaginal fistule, cured by the *clamp suture* (long since abandoned by its author, and now seldom resorted to by any one, I believe), was published in the New Orleans *Medical and Surgical Journal*, for May, 1854. My second case, also cured by the *clamp suture*, was published in the *Southern Medical and Surgical Journal*, for August, 1855. My other cases, thirty-nine in number, treated with our *button suture*, were published in the Louisville (Ky.) *Review*, for May, 1856; *North American Medico-Chir. Review*, for July and November, 1857; *Edinburgh Medical Journal*, and *Glasgow Medical Journal* for Oct. 1858; *Gazette des Hôpitaux* for Jan. 4th and 6th, 1859; New Orleans *Medical and Surgical Journal*, for January, March, and May, 1860, making in all forty-one cases, and ranging through a period of about seven years.

At the date of my last report, in 1860, I can say, and with some little pride too, that my number of recorded cases exceeded that of any surgeon either in this country or Europe. Even at this writing, no other surgeon in this country has published, that I am aware of, an equal number; and it has only been exceeded in Great Britain by Mr. Isaac Baker Brown, whose entire number about equals mine, reported and unreported.

By reference to my cases, some of them will be found of the greatest interest, I think, as denoting important improvements in the treatment of certain classes of fistules, aside from the revolution that was effected almost at the very outset, by the inauguration of a *new form of suture*. I may mention, first, *the paring and suturizing of the cervix uteri*. This had been done previously, it is true, by Jobert (de Lamballe), but the precedence was unknown to me at the time of my first operation in 1855; secondly, a new and successful plan of treating *rents* of the urethra; thirdly, *the making of the uterus subservient to the closure of large fistulous openings, by hauling it down and attaching it to the anterior border of the fistule*, thus superseding the necessity of a resort to M. Jobert's dangerous and unsuccessful procedure, *d'Autoplastie par glissement ou par locomotion*, the only plan then practised in such cases by surgeons generally; fourthly, *a successful plan of disengaging or extricating the cervix uteri from the bladder when incarcerated in the latter organ, as sometimes happens, and at the same time closing the fistulous opening, thus giving the menstrual flow its natural outlet, a procedure in which I claim priority, and so far as my reading extends there are no other cases, except my own, to be found upon record, treated according to my method or otherwise;* fifthly, *transverse or horizontal obliteration of the vagina in a class of cases where the loss of tissue has been so great as utterly to preclude the possibility of closure of the fistulous opening in the usual way.*

The grounds upon which I claim priority in the latter operation will appear and be better understood from my remarks in connection with the narration of the following interesting case, whose peculiarities occasioned the adoption of the novel procedure. With this case I resume the publication of my reports, which will be continued in the RECORD until completed.

CASE XLII.—J. F., colored, æt. 19, entered my private hospital Jan. 1, 1859, laboring under the extensive and complicated injuries above stated; of medium stature, well formed, and healthy looking. About the age of sixteen was confined with her first child, at full term; labor was short and unattended with difficulty; the result being satisfactory as regarded both mother and child. Eighteen months afterwards was confined with her second child: labor lasting this time about forty-eight hours; child still-born. No instruments were used, a midwife being the attendant.

Patient thinks she did not pass any urine during labor, and believes that her suffering was greatly increased from this circumstance; says that her urine began to dribble from her as soon as labor was completed, and from that time to the present moment has never been able to pass it in the natural way. The general health to all appearances is good, far better than could have been expected under the circumstances.

Examination.—The patient, on being placed upon her knees and elbows before a strong light, was found to have a sufficiently capacious pelvis, the labia majora were thickened and excoriated, and between them protruded the fundus of the bladder, in the form of a large fleshy tumor, as large as a medium-sized orange, with both ureters plainly visible upon its surface. Gentle pressure with the ends of the fingers upwards and backwards, upon this extruded portion of the bladder, carried the fundus through the immense chasm in the anterior wall of the vagina to its normal position. The introduction now of the lever speculum brought fully

into view a fistulous opening, with *metes* and *bounds* truly appalling. In the sloughing process I found that nearly all of the infravaginal portion of the cervix uteri, the basfond and trigone of the bladder, and nearly one-half of the urethra had been carried away, thus presenting an example of a fistule belonging to both my *fourth* and *fifth classes*,* which I had never observed before.

The borders of this opening, as well as the stump of the cervix uteri, had the appearance of being healthy, there being no abrasions, as are commonly seen in injuries of this nature far less serious. A striking feature, however, was their immobility; no movement of its sides or depression of the uterus could be effected, thus precluding the possibility of any compensation for loss of tissue by hauling the uterus down, as I had always been able to do before in the largest sized fistulous openings.† Another feature of the anterior border is worthy of note—viz., the partial exposure of the pubic arch; the bones could be traced with the finger half or three-quarters of an inch on either side of the symphysis pubis. I next had the patient to turn upon her back, in order to explore the posterior wall of the vagina, having already perceived indications of a *recto-vaginal fistule*. The introduction of the speculum at once disclosed the situation and nature of this additional, and, I may say, very grave and serious injury, complicating as it did the one which we have just described of such formidable proportions. It was situated about two and a-half inches from the anus, and was oval in shape, with its long axis extending directly across the *recto-vaginal septum*. Its lower border was involved in a broad, hard, and somewhat unyielding band, which extended entirely across the posterior wall of the vagina. This band I found to influence very materially the mobility of the edges of the fistule, and there was a doubt in my mind at the time as to whether their approximation could be effected, even with the best course of preparatory treatment that could be instituted.

Treatment.—Here I must be allowed to quote my own remarks from the New Orleans *Medical and Surgical Journal*, for January, 1860. Upon resuming the publication of my cases in that journal, these remarks were called forth by the peculiarities of this particular case, and the treatment that was adopted for its successful management, May, 1859. I am thus particular in stating the precise dates of treatment and publication of remarks, as the question of priority of operation will be discussed hereafter:

"Several of the cases that I am now about to report are of unusual interest; one, perhaps, the most remarkable on record. This was a case of both vesico-vaginal and recto-vaginal fistules, and from its peculiarities occasioned the inauguration of a new and successful plan of treatment never before adopted, that I am aware of, and one to be regarded of the greatest practical utility.

"The unyielding nature of the posterior septum could not be overcome by any plan of treatment. This, therefore, left us with no other alternative than the obturation of the vagina at the vulva, according to the method of Vidal (de Cassis). In addition, now, to the ordinary objections to the above procedure, there was one in the present instance, that at first appeared insurmountable; namely, the existence of the recto-vaginal fistule. With this remaining, not only the urine and catamenia, but the fæces, would have been turned into one common receptacle, with no other outlet than the urethra. For the latter to become dissolved in the other two excretions, and be discharged with them, would have been next to impossible. M. Vidal's operation, therefore, was out of the question, unless the recto-vaginal opening could first be closed; and to the success of this there appeared one very great obstacle, namely, the uncontrolled urine. This, in almost any position of the patient, would necessarily come more or less in contact with the raw edges of the fistule when brought together, and by its irritating effect have prevented their union. Relying, however, upon the protective power of our button, as shown on former occasions in the management of double and triple vesico-vaginal fistules, I resolved to hazard an attempt at least to place our patient in a condition for obturation of the vagina, which, however partial the relief promised, seemed to be called for under the circumstances. I say partial relief, because it is well known that closure of the vagina, as directed by M. Vidal, leaves the patient with no control over the urine, to say nothing of the ill consequences arising from the more or less stagnation of this fluid and the catamenia at the lower part of the vagina. To prevent the latter result, therefore, it required that these excretions should always be freely and completely discharged, whether involuntarily or not. This, in my judgment, could be effected in no other way than by *attaching the posterior to the anterior wall of the vagina just below the vesical extremity of the urethra, thus placing our line of cicatrization horizontally and far above the perpendicular one of M. Vidal, just within the meatus urinarius*. Therefore, after closing the recto-vaginal opening, if possible, I determined to put into practice this new procedure. Accordingly, I went to work, and to my great astonishment the rectal opening was closed at our first trial. It remained now for me to see what could be realized by the procedure above proposed."

The operation consisted simply in paring off the mucous membrane across the anterior wall of the vagina up to the very brink, so to speak, of the chasm already described. In a similar manner the mucous membrane was pared off around and across the posterior vaginal wall, just opposite, and to a corresponding extent. The denuded surface all around averaged in width half to three-quarters of an inch.

This stage of the operation being completed, eight silver-wire sutures were next introduced and adjusted in the usual manner, which brought the two raw surfaces of the opposing walls of the vagina in perfect apposition. A *button* then of the ordinary shape, one inch and three-quarters in length, with holes to correspond to the number of sutures, was next slid down upon the approximated parts, and then secured by compressing a perforated shot upon the two ends of each wire. A catheter was now lodged in the urethra, and the patient placed in bed. In the after treatment no other attention was called for than that required in an ordinary case of vesico-vaginal fistule. Suture apparatus removed on the ninth day.

"Suffice it to say, our first operation was attended with entire success, and our patient, contrary to the most sanguine hope, had almost complete control over her urine. I say almost complete, because she retains and passes it at will, dribbling only taking place from the urethra occasionally when she goes too long without emptying the bladder. She keeps perfectly dry at night, not requiring to get up at all, and during the day, when walking about, she can sometimes go three or four hours without any dribbling.

"When I performed this operation, I did not for a moment suppose that our patient would regain, to any extent, the power of controlling her urine, if ever so successful. The most that I hoped for was a mechanical

* See *North American Med. Chir. Review* for July, 1857.
† *Op. cit.*

obstruction to its flow while the patient was in the recumbent posture, thus enabling her to lie dry at night. The result, however, has proved most conclusively that the vagina, thus occluded, secures to the patient the power of retaining and passing her urine at will, as though the fistulous opening itself were closed.

"This operation, therefore, cannot be regarded otherwise than as a great triumph. It enables us now to manage a class of cases, if not as satisfactorily as we could desire, certainly upon scientific principles, and with results never heretofore attained, as far as my information extends. Vidal's operation, however successfully performed, must, from the very nature of things, always be attended with an involuntary flow of urine upon leaving the recumbent posture, and therewith a downward pressure or unpleasant feeling at the lower extremity of the vagina, caused by the accumulation of urine and the catamenia constantly going on there."

Remarks.—The result in this case, as regards both the recto-vaginal fistule and the *transverse or horizontal obliteration of the vagina*, must strike every one, under the circumstances, as being satisfactory in the highest degree. Something over eight years having now elapsed since this operation was done, I have only to say my views have undergone no change, as to the importance of the procedure and its superior advantages over M. Vidal's method.

Recent and further examination into the literature of the subject satisfies me that my claims to priority in the operation of which we are speaking were just, at the time I first called the attention of the profession to it in the journal already referred to. Neither in this country, France, Great Britain, nor Ireland, had there been at the period named a successful operation of the kind; and even now, the records of the profession in the countries named, so far as my reading extends, do not afford another authenticated example.

In Germany, it is true, Prof. Simon, of Rostock, a few months before I performed my operation, proposed precisely the same procedure,* *cross obliteration of the vagina* (*queren obliteration der scheide*), and had actually performed the operation twice, though without any success. We have, therefore, no proof of his having ever effected a cure by his procedure prior to the date of my paper. But when we know the kind of cases in which Prof. Simon first proposed his operation, there will not be found such a willingness, I imagine, to award him the credit he might otherwise have been entitled to. He tells us that the case which suggested this novel procedure to him was one in which the vagina was almost in a normal state, and the fistulous opening so small as only to admit the end of the finger, *but it was deeply situated in the vagina and difficult to approach.* These were the circumstances, after several attempts to close the small fistule, we are told, which called forth the above expedient, and which fortunately proved equally unsuccessful. I say fortunately, because it was truly so to both patient and reputation of surgeon, for the latter tells us afterwards he succeeded in closing the same fistule and discharged the patient cured, a result to her infinitely preferable to that of an obliterated vagina, and certainly more in accordance with correct principles of surgery, all must admit. As appears from the date of Simon's article quoted, he did not publish his views until two years after mine appeared, but he makes no mention whatever of my case or operation. I should be disposed to attribute this oversight or neglect to the fact of his having not seen my papers, but the palpable injustice is made manifest by his resort to my plan of suture, and in the very case too upon which he first tried *transverse obliteration* of the vagina, and failed.

I will defer saying more at the present time in connection with this important operation, as I hope to be able soon to present my views upon it in a different form, and with suitable illustrations.

FIFTH AVENUE HOTEL.

* Ueber die Operation der Blasen-Scheidenfistein durch die Blutege Naht. 1862.

ACUTE INFLAMMATION OF PSOAS MAGNUS MUSCLE.

BY J. W. GROSVENOR, M.D.,

PROVIDENCE, R. I.

ACUTE inflammation of the psoas magnus muscle is a very rare disease. In searching medical literature I find only a single case reported in detail, and that by Dr. C. W. Parsons, of this city, in the Boston *Medical and Surgical Journal* of September 10, 1851. A case is mentioned by Prof. Gross in the 1866 edition of his surgery. On page 594, he says, "An instance has been reported of a young man who died from rupture of the psoas muscle, death having been preceded by severe inflammation and infiltration of pus."

In a letter to Dr. Anthony, of this city, Prof. Gross regrets his inability to refer to the particular case. Prof. Willard Parker informs me by letter that he has the notes of two unpublished cases which have occurred in his practice. I hope we may soon see them in print.

The following case has lately come under my observation.

Lemuel Grosvenor Perry, a student, nineteen years of age, strong and healthy from birth, while playing ball, on June 27, 1867, felt something "give way" in his right side.

Soon after returning home on the same day, he was taken sick with vomiting and quite a sharp pain in the right lumbar region. Tongue was slightly furred, bowels constipated, pulse full and about ninety per minute.

A cathartic of magnesia in combination with charcoal acted promptly, by which the pain was considerably relieved and the vomiting entirely. On the morning of June 29th, patient had quite a severe chill. For the four or five days following there was but little change in the symptoms—pulse fair, and about eighty per minute, tongue slightly brown and moist, stomach uncomfortable, tendency to diarrhœa, the pain in the right lumbar region continuing, though not severe. July 4th, a swelling and hardness were observed over the seat of the pain. It was circumscribed, and covered a space of about four square inches, its centre being on a vertical level with the anterior superior spinous process of the ilium. For two or three days it became a little more prominent, and then remained *in statu quo.*

Patient found urination difficult without standing. He could not fully extend his right leg, kept the right thigh flexed on the abdomen, and rotated outwards, moved from side to side in bed with difficulty and pain; when on his feet assumed a stooping posture, with the body inclined towards the right side. Abdomen not swollen, and not tender on pressure, except in right lumbar and right iliac regions. From about the 4th to the 12th, patient was comfortably sick, was able to get up without assistance every day, his pulse fair, the general symptoms being the same as during the few days previous to the appearance of the swelling. At 3 A.M. of the 12th, he was seized with a severe pain and excessive vomiting of a greenish-looking material; cold, clammy perspiration followed, pulse became very rapid and feeble. Vomiting continued with slight abatement till death at 6½ o'clock P.M. of the same day.

Treatment previous to the sinking stage, on July 12th, consisted of a cathartic at the outset of the disease, as already mentioned, injections of starch and laudanum to control the diarrhœa, anodynes sufficient to relieve pain and procure rest and sleep at night, animal broths and some fruits, occasionally brandy and water. The tumor was painted with tincture iodine for several days, and leeches applied to it on the 11th. In the stage of collapse treatment consisted in morphia injected hypodermically, and iced champagne, to which were added a few drops of chloroform. During his sickness the patient, who was under the medical care of his father Dr. Perry, was seen by Drs. Peckham and Parsons, of the city, and Dr. Clapp, of Pawtucket.

Autopsy by Dr. Mason, seventy-two hours after death. Greater omentum slightly adherent to small intestines, which were considerably congested. Lower part of ascending colon and appendix vermiformis adherent to abdominal wall. A few fibres of psoas magnus muscle were rough and broken down, and the muscle itself dissected up along its posterior surface, and the peritoneum separated from its anterior surface. The anterior crural nerve running along the outer border of the muscle was separated from all attachments for a distance of six inches. About three pints of purulent fluid in peritoneal cavity. The rupture of the peritoneum was apparently between the stomach and liver. Right kidney healthy. No diseased bone discovered.

Undoubtedly inflammation commenced at that part of the psoas magnus muscle where the fibres were broken down, an abscess followed, and pus as it was formed burrowed under the muscle, dissected up the peritoneum, and finally burst into the peritoneal cavity on the morning of July 12th, at the time when the alarming change in the symptoms occurred.

I have seen no account of this disease in the English language. In Copland's Medical Dictionary occurs an article on inflammation and suppuration of the psoas muscles. The author mentions psoitis as one of its synonymes, but he evidently refers to psoas abscess, which is a *chronic*, not an *acute* disease. The only article on this subject which I have seen is in the *Dictionnaire de Medicine*, vol. xxvi., under the heading Psoite. The rarity of the disease, and the meagre amount of literature upon it, may justify me in presenting a resumé of this article.

Causes of Psoitis.—Falls, blows on lumbar region and pelvis, violent movement of body backwards and forwards on lower extremities; raising heavy weights; very severe exercise. Ferrus, the author of the article, thinks rheumatism has a great influence on the development of the disease.

Symptoms.—Pain in lumbar region, which soon extends to groin and thigh—usually intolerable, rarely almost nothing. Extension and flexion of thigh greatly increases the pain. Walking difficult or impossible. If patient walks trunk is strongly inclined forwards. Engorgement of inguinal glands. As disease progresses pain becomes severer, and lower extremity of affected side is constantly flexed and slightly turned outwards. An attempt at extension or rotation gives excessive pain. This position of the limb is ordinarily the most characteristic sign of psoitis. Sometimes there is numbness in the limb. Fever declares itself, digestive organs become deranged; sometimes nausea and vomiting occur, often diarrhœa, rarely constipation; urine is sometimes purulent, sometimes colored with blood. At last in the groin or lumbar region appears a tumor more or less extensive, fluctuating, not changing color of skin, not painful on pressure, drawing back into interior of abdomen. In this tumor, whether it opens spontaneously or is opened by an instrument, is found more or less pus. Hectic fever follows, pulse becomes small and frequent; a cough appears, colliquative diarrhœa supervenes, and the patient dies of marasmus.

Pathological Anatomy.—The muscle is found in three conditions. First, it is entirely preserved, but softened, in color like the lees of wine, infiltrated with black blood, and easily torn. Secondly, vestiges of the muscle remain, of the consistency of pulp, blackish in color, and of a disagreeable odor. Thirdly, the muscle is completely destroyed by suppuration.

The secretion is not pure pus, but a mixture of pus and muscular fibres not entirely broken down. Usually suppuration extends outwards towards the surface, but Ettmaller and Withmore have each reported a case in which the purulent matter found its way into the intestine and appeared in the evacuations. These two patients died, and the autopsies revealed a communication between the abscess and colon in both cases. Sometimes the secretion follows the psoas and iliacus muscles as far as their insertion into the lesser trochanter, and infiltrates the muscles surrounding the coxo-femoral articulation.

Diagnosis.—The symptom which may be considered pathognomonic is flexion of the lower extremity upon the trunk in the direction of the fibres of the psoas muscle.

This sign, taken in connection with the acute pain caused by rotating the limb, will enable us to make out a diagnosis in a large majority of cases. Sometimes a diagnosis is very difficult. From abscess due to a change in lumbar vertebræ it may be distinguished by the rapidity of its course, by absence of deformity in vertebral column, by the impossibility of extending the leg and of easily executing the movement of rotation. Nephritis, although resembling psoitis in the seat of the pain, differs from it in not preventing the movements of extension and rotation of the limb. In hernia the absence of fluctuation in the tumor, digestive troubles, and absence of lumbar pain, exclude the existence of psoitis. Sometimes there is great difficulty in diagnosticating between coxalgia and psoitis. In the latter as in the former, the pain extends along the thigh and sometimes as far as the knee, and also there is sometimes the same difficulty of rotation in one as in the other. Still, the principal seat of the pain at the outset of the disease being in the lumbar region in psoitis, and in coxalgia in the external iliac fossa, will usually prevent any mistake. (From abscess of the appendix vermiformis and from iliac abscess I think psoitis may be distinguished by the peculiar position of the limb in the latter, viz. flexed upon the abdomen and rotated outwards.)

Prognosis.—Psoitis is a very grave disease. Dr. Kyll thinks the prognosis very favorable, all his five patients having recovered, and yet he admits that he is not quite sure whether the seat of the disease was in the psoas muscle, the lumbar vertebræ, or the pelvic cellular tissue. Psoitis does sometimes terminate in recovery, as is shown by a case reported by La Motte. Fluctuation was felt deeply along the vertebræ and loins between the last rib and ilium. A large incision was made, and six pounds of pus extracted. After five months the patient recovered. There was some doubt, however, as to the nature of the disease. (Prof. Willard Parker informs me that the two cases which have come under his observation recovered.) In the collections of pus which form in the pelvic cavity the bursting of the abscess into the intestines is considered favorable, but in psoitis such an event is considered unfavorable, as is shown by the two cases already mentioned.

Treatment.—As soon as the patient complains of pain along the track of the psoas muscle, and other circumstances enable us to predict inflammation, general bleeding is recommended, repeated applications of leeches

and cups to the loins and groin, fomentations, frictions with mercury, ammonia, iodine, etc. Finally, blisters and cauteries may be employed. If suppuration takes place, the painful parts should be covered with warm poultices; and constipation should be relieved by a purgative or laxative. If the abscess points at the surface, it should be opened.

CASE OF POISONING BY ALCOHOLIC EXTRACT OF BELLADONNA.

By H. A. DUBOIS, M.D.,

ASSISTANT SURGEON, U.S.A.

As the following case presents several points of interest, I transmit it with but few comments:

December 28, 1866, feeling indisposed, I ordered for myself: Sulph. quin., grs. v.; ext. coloc. co., grs. x.; pil. mass. hyd., v.; M. Ft. pil. No. iv.

I received the four pills, two of which I at once took, and soon after retired (about eleven P.M). I slept but little, but was not very restive, and did not observe anything peculiar in my sensations until near eight A.M. the following morning, when, on putting my foot to the floor, I came near losing my balance, and staggered for some distance across the room, unable to support myself steadily, or regulate the movements of my legs. Dressing with much difficulty, I managed to reach the surgery, where, seating myself, I commenced prescribing for the sick. I now, for the first time, found that I was unable to read the names on the sick report, the page appearing perfectly blank. Up to this time I had not been able to control my thoughts. On rising, I remember that I had a faint idea that something was wrong, but was unable to say what; the acts in putting on my clothes were performed nearly involuntarily, the prominent idea being the necessity I was under of being punctual at my post at sick call. Not seeing any names on the sick report, I asked the steward the reason, and then discovered that I could not control the movements of my tongue. I managed, however, to make myself understood, and was informed that the names were there. I remember that then, by a strong impulse, I collected my thoughts to endeavor to ascertain the cause of my disability. The first thought which presented itself was that I was drunk, but this I rejected, as I could not remember having drunk any intoxicating liquor the preceding day. Next, I ran over my actions the evening before, and I recalled the two pills I had taken, recollected their composition with difficulty, and the thought then struck me that as the extract of colocynth and extract of belladonna were both put up in pots much alike, one had been mistaken for the other. I remember that I recalled the amount that I had probably taken, and determined that I would prescribe for the sick, if I could neither see, speak distinctly, nor stand steadily, before I retired to my room. I ordered the steward to call the names out, and when the first man came up I could see his outline, but could not recognize his features. I, however, remembered his name and what should be the matter with him, and having his last prescription read out, I continued it, afraid to trust myself in prescribing. In this way, with few changes, and then careful to use the simplest of medicines, I saw, or rather did not see, some thirty sick, for each of whom I prescribed, or continued his former prescription.

I then returned to my room with a brain whirling, a dull, heavy pain in the back of the head, and my mind wandering from time to time. I recollect distinctly trying to collect my thoughts, and using the utmost exertions of my will to keep them fixed, so as to try to remember the smallest fatal dose of the extract of belladonna, and to recall all the symptoms of poisoning from that drug, and their proper treatment. I came to the conclusion that I would treat myself on general principles. I had some strong coffee brought and put before me, and drank cupful after cupful. I sent for whiskey, and mixing it with the coffee, I continued its use, taking also, during the day, several half-grain pills of morphiæ sulph.

This treatment relieved the giddiness. I found my mind ceased to wander, and though a vague feeling—a feeling of vacuity—of a lack of something, still continued, together with a severe pain in the back of the head whenever I tried to think, I felt better. I now tried to examine my eyes in a glass, but could only see a general outline. However, by going across to the other side of the room and looking at the glass, I managed to discover that my pupils had expanded so that I could see no iris. As I now look back to this period, everything—my thoughts and actions—all seem vague and misty; though I remember them, and that distinctly, still the thoughts seemed to have formed themselves under the power of a strong effort of the will, and that the least relaxed, the thought would escape. So too, with my actions. In walking, I can remember that on fixing one foot on the ground, it required an effort of the will to raise the other, and much judgment in so placing it that the body's centre of gravity was preserved. My arms and legs—but the latter not to the same extent—felt numb and cold to my touch. With great difficulty I held anything in my hands. By noon, or four hours since I first noticed the effects of the poison, I was able to visit and prescribe for some twenty patients in hospital, but returned greatly exhausted This state continued all the afternoon and evening, and I passed a sleepless night; my mind wandering, and vague and misty visions presenting themselves. For two days my vision continued much impaired, and then it gradually became normal as the pupils resumed their usual size.

While my vision was most impaired, I noticed objects nearly as well as ever a mile or two out on the prairie, though if I looked attentively, the effort became exceedingly painful. The action of the brain slowly became normal. Exertion of any kind—even the reading of the simplest book—caused intense fatigue, and a dull heavy pain in the back of the head. These symptoms, together with great lassitude, continued for between two and three weeks. There are a few symptoms that I have neglected to mention. Colicky pains, and dryness of mouth and throat presented themselves on the second day. The dejections for several days were dark colored, and extremely offensive, and the urine was voided frequently and in large quantities. Some days after these symptoms, I noticed on my hand a large red blotch, which disappeared on pressure, and which in the course of a week faded, leaving the skin rough. For two months I felt lassitude, and but little mental exertion was required to bring back the peculiar feeling in the head.

I have described this case with minuteness, as its chief point of interest seems to me to reside in the control the will appears to have had over the cerebrum, constantly bringing the mind under control, and holding it to its work; and in the remembrance of things, and their appearance, seen with a brain and through optic nerves poisoned with belladonna.

In conclusion, I will only add that the amount of poison taken was five grains. The preparation used was Squibb's alc. ext., and, as I had supposed, it had been used for the ext. coloc. co. by the soldier whom I had been compelled to use as a steward.

Original Lectures.

LECTURES UPON THE PHYSICAL EXPLORATION OF THE ABDOMEN.

DELIVERED IN THE PRELIMINARY COURSE AT THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NEW YORK.

By ALFRED L. LOOMIS, M.D.,

PROFESSOR OF INSTITUTES AND PRACTICE OF MEDICINE.

Lecture II.

PHYSICAL SIGNS OF DISEASED CONDITIONS OF THE LIVER AND SPLEEN.

Gentlemen—I will endeavor this morning to detail to you the physical signs by which we determine the changes that take place in the liver and spleen during the progress of disease. I will commence with the LIVER: Our diagnosis in any case of hepatic disease rests mainly on the size, form, and position of the liver, as determined by percussion and palpation. The first step then in studying the physical signs indicative of disease of this organ is to become familiar with its normal boundaries. In its healthy state, the right lobe of the liver occupies the right hypochondrium, lying completely in the hollow formed by the diaphragm, rarely descending below the free border of the ribs, or extending upwards above the fifth intercostal space; the left lobe reaches across the median line to the space below the ensiform cartilage.

The upper boundary of the organ is determined by percussing with moderate force from the right nipple downwards until the flatness of the percussion sound indicates that a solid organ has been reached; draw a line at this point. Then percuss downwards from the axilla, and from a point a little to the right of the median line in front, in the same manner, until the same change occurs in the percussion sound; a line drawn through the points which mark these changes in the percussion sound, determines the upper boundary of the liver, and it will be found generally to correspond to the base of the ensiform cartilage on the median line in front; to the fifth intercostal space on the line of the right nipple; to the seventh rib in the axillary region, and to the ninth rib in the dorsal region. The lower boundary of the organ is determined by percussing downwards from the line of flatness already determined, and noting the points where the tympanitic sound of the stomach and large intestine occurs, which will generally be found to correspond anteriorly with the free border of the ribs, and to a point three inches below the ensiform cartilage on the median line; laterally in the axillary region to the tenth intercostal space; and posteriorly in the dorsal region to the twelfth rib. The flatness of the left lobe usually reaches two inches to the left of the median line. The whole margin of the liver (except where it comes in contact with the apex of the heart through the medium of the diaphragm) may thus be determined and marked out on the surface. The vertical measurements will be found very nearly as follows: three inches on the right of the median line in front, four inches on a line with the right nipple, four and one-half inches in the axillary region, and four inches posteriorly in the dorsal region. The smooth edge of the lower margin of the liver in health (especially in thin subjects) can be distinctly felt underneath the free border of the ribs.

The healthy liver in its normal position evidently influences very little the percussion sound over the lower half of the abdomen, which (as has already been stated), when the organs there situated are normal and empty, yields tympanitic resonance from immediately below the margin of the ribs to the pubes; if, therefore, the percussion sound is dull over any portion of this space, and the dulness is uninterrupted to the margin of the ribs on the right side, we have good reason for believing that the liver is the organ diseased.

The *normal boundaries* of the liver already defined may be greatly altered without any abnormal change occurring in the organ itself. These normal changes, unless remembered, may lead to errors in diagnosis. Thus congenital malformations may give rise to an increase in the area of hepatic dulness; an accurate history of the patient, however, will keep us from error in such cases.

In examination of children, it should also be remembered that the liver is proportionally larger than in adults.

The practice of tight-lacing may cause displacements and malformation of the liver, and thus give rise to apparent hepatic enlargements. The marks which this practice leaves on the chest wall will be sufficient to attract our attention, and so prevent mistake.

Diseases of the thoracic organs, and abnormal conditions of the other abdominal viscera, sometimes cause displacement of the liver, simulating very closely hepatic enlargement; these we will consider under the head of *differential diagnosis* of the diseases of the liver.

Variations in the size of the liver in hepatic diseases.—Variations in the size of the liver occur in almost every disease to which it is subject. It is *increased* in size in *fatty liver*, in *waxy liver*, in *hydatid tumor*, in *abscess of liver*, in *congestion*, in *acute hepatitis*, in *obstruction of the bile ducts*, and in *cancer*.

It is *diminished* in size in *cirrhosis*, and in *acute atrophy*.

Enlargements of the liver were divided by Dr. Bright into smooth and irregular. Dr. Murchesson has divided them into painless and painful enlargements. Both of these divisions, it seems to me, have their objections, and in giving the physical signs of the various diseases accompanied by enlargement of the organ, it is hardly practicable to adopt either of them exclusively.

Fatty Liver.—In fatty degeneration of the liver the organ is uniformly enlarged; there are no circumscribed bulgings; its normal shape is unaltered; there is no expansion of the lower ribs, it *never* gives rise to ascites, and it is not attended by any visible enlargement of the superficial veins. In palpation below the margin of the ribs on the right side, and in the epigastrium, a soft cushion-like enlargement is readily detected, extending not unfrequently as low as the umbilicus; its outer surface is smooth, and its lower margin is rounded and not well defined; it is never *tender* on pressure. On percussion there is flatness over the surface of the abdomen, corresponding to the enlargement.

Waxy Liver.—In waxy or amyloid degeneration, the organ undergoes greater enlargement than in fatty degeneration; it often becomes so large as to fill the whole abdominal cavity; its growth is slow, usually extending over a period of two or three years. The enlargement is uniform, and the area of hepatic dulness is consequently increased on percussion in every direction, more however in front than behind. There is often on inspection a visible tumor below the margin of the ribs, but there is no bulging of the ribs themselves. *On palpation*, the portion of the organ below the ribs is dense, firm, and resistant, the outer surface is smooth, the lower margin is sharp and well defined. Pain and tenderness are rarely present, so that the portion of the

organ below the ribs (as in fatty degeneration) can be manipulated without giving the patient any inconvenience. When excessive, it is almost always accompanied by ascites.

Hydatid Tumor of the Liver.—Hydatid cysts, when small or deep-seated, cannot be detected by physical examination; but large and superficially seated hydatid cysts are recognized by abnormal increase in the area of hepatic dulness, the outline of the dulness being irregular, and by the globular form of the enlargement on the surface of the organ. Sometimes these cysts are so large as to cause the organ to fill a large portion of the abdominal and right pleural cavity; the natural form of the organ is greatly altered, the enlargement taking place more in one direction than in another. Sometimes percussion over a large hydatid cyst will give rise to a characteristic vibration (known as hydatid fremitus); this vibration is produced by the collision of the smaller cysts that are contained in a large one. A hydatid liver encroaching on the thoracic space gives rise to flatness on percussion, and absence of respiratory sound, from the base of the chest upwards as far as the tumor extends, the upper boundary of the flatness being arched. It is distinguished from pleuritic effusion in that a change in the position of the body does not change the line of percussion dulness. On palpation sometimes the enlarged portion below the ribs has an elastic or even fluctuating feel, and if a large cyst be near the surface it may give rise to a sense of fluctuation; the surface over these enlargements is smooth, and the organ is not *tender* on pressure, and its growth is slow.

Abscess of the Liver.—When hepatic abscesses exist, from whatever cause, it depends entirely upon their situation, whether an external tumor is produced or not; if the abscess occupies the posterior portion of the right lobe, the liver is pushed down so that its margin is perceptible below the free border of the ribs, and the flatness on the right side posteriorly extends higher than natural. When an abscess is superficial and is pointing externally, a distinct tumor is felt below the ribs; the situation of the tumor varies according as the right or left lobe is affected, and there is always more or less bulging of the ribs if the right lobe is affected. A tumor arising from such a cause is easily traced as connected with the liver, of which it evidently forms a part, the flatness on percussion being continuous. Sometimes the organ is enormously enlarged, its free border extending below the umbilicus, the surface of the enlargement being smooth, and *excessively tender* on pressure. The sensation to the examiner on making light pressure will be soft and fluctuating, or that of elastic tenderness. In some rare instances, abscesses produce an uneven or lobulated condition of the surface; under such circumstances, it may be mistaken for cancer, unless the rational symptoms and history of the case be included in the elements of diagnosis. The enlargement goes on rapidly; with a correct history of the case the diagnosis is easily made.

Congestion of the Liver.—The most simple form of hepatic enlargement is that which results from congestion. When the liver is thus loaded with blood, a slight fulness is perceptible on the right side. On palpation the space immediately below the ribs is occupied by a smooth, hard, resisting enlargement, corresponding to the natural shape of the liver, which is not usually tender to pressure, and there is no well defined tumor. On percussion a flat sound is elicited an inch or two below the margin of ribs on the right side.

Obstruction of the Bile-ducts.—A similar enlargement of the liver to the one just noticed occurs when, from any cause, there is obstruction in the biliary ducts, and an accumulation of bile takes place in the liver. Sometimes when this occurs, in addition to the general enlargement detected by the slight uniform increase in the normal area of hepatic dulness, a globular projection is detected at a point corresponding to the transverse fissure of the liver, with the elastic feel of deep-seated fluid; this tumor is the distended gall-bladder.

Acute Hepatitis.—The physical signs of acute hepatitis do not differ materially from those of simple congestion, except in the excessive pain that exists on pressure over that portion of the organ which descends below the ribs.

Cancer of the Liver.—In most cases of cancer, the diagnosis is easily made by the physical signs.

On percussion, the area of the hepatic dulness is always increased, sometimes extremely so; the organ is found to occupy the greater portion of the epigastrium, extending beyond the median line to the left hypochondrium (pushing the diaphragm upwards), and often descending below the ribs to the crest of the ilium.

On palpation, irregular nodules of various sizes are distinctly felt through the abdominal walls, projecting from the surface of that portion of the enlarged organ which is below the free border of the ribs; these prominences are usually harder than the surrounding hepatic tissue, and there is more or less tenderness on pressure over them. Cancer of the liver may or may not be accompanied by ascites. Occasionally the surface of the liver in cancer is perfectly smooth, and in such cases you will be unable to detect the disease by the physical signs.

Diminution in the Size of the Liver.—The liver is diminished in size in cirrhosis, and in acute atrophy.

Cirrhosis of the Liver.—In fully developed cases of cirrhosis of the liver, the organ is always diminished in size, and there is more or less abdominal dropsy. The only evidence of this disease furnished by inspection, is a visible enlargement of the superficial veins.

Percussion.—The area of the normal hepatic flatness is diminished, and its limits are determined as follows: If the abdominal cavity is distended with dropsical accumulation, the patient should be placed partly on the left side, so that the fluid will gravitate from the hepatic region; the percussion flatness then, instead of extending to the free border of the ribs, will often give place to tympanitic resonance an inch or more above their free margin, and instead, also, of extending across the median line into the left hypochondrium, will rarely reach that line, while the vertical measurement of hepatic dulness, on a line with the right nipple, often does not exceed two and a half inches.

Palpation.—By firm pressure with the ends of the fingers upwards, little nodules will often be felt on the under surface of the organ. Sometimes, when the distension of the abdomen from the dropsical accumulation has been very great, we can get no information by palpation until after the performance of paracentesis.

Atrophy of the Liver.—The only physical sign of atrophy of the liver is progressive diminution in the size of the organ as ascertained by percussion, its surface remaining smooth, the diminution not being accompanied with ascites.

Differential Diagnosis of Diseases of the Liver.—The sources which may lead to error in the conclusion that the liver is the seat of disease when it is not, are—first, accumulations in the ascending and transverse colon; diseases with enlargement of the right kidney; diseases of the stomach; displacement of the liver by disease in the right side of the chest; enlargement of the spleen; tumors of the omentum, and ovarian tumors.

Fæcal Accumulations.—To distinguish these accumulations from enlargement of the liver by physical ex-

amination is always difficult and sometimes impossible; they give rise to a distinct tumor below the border of the ribs, which, by percussion and palpation, seems to be continuous and connected with the liver. The differential diagnosis can only be made after making trial of remedies which, by acting freely on the bowels, remove the accumulation and cause the disappearance of the supposed hepatic enlargement.

Disease of the Right Kidney.—The right kidney sometimes enlarges in such a manner as to present itself as a tumor, extending from the under surface of the right lobe of the liver. If it has attained considerable size, it may therefore seem to be continuous with the liver as a growth from its substance. It may be distinguished from the liver by carefully examining its relation to the ribs; as the patient lies on his back, the enlargement, instead of passing up under the ribs, slips down, so as to allow the finger to pass vertically between the tumor and ribs.

Disease of the Stomach.—The only disease of the stomach which we are likely to confound with enlargement of the liver is cancer. It can, however, usually be readily distinguished from it by the tympanitic quality of the percussion sound over the cancerous mass, and by the mobility of the supposed enlargement.

Displacements of the liver downwards from extensive pleuritic effusion and from pneumothorax are recognized by the presence of the physical signs which indicate these thoracic diseases.

Enlargement of the spleen, and *ovarian tumors*, are distinguished from enlargements of the liver by the shape of the tumor, and by the continuous and increasing flatness of the percussion sound as we pass towards the normal position of these organs.

Spleen.—The spleen, from the obscurity which involves its natural function, so that its affections usually give rise to but negative general symptoms, and from its comparatively isolated situation, often presents greater difficulties in the diagnosis of its morbid conditions than is the case with any other abdominal organ. In health this organ occupies the upper portion of the left hypochondriac region, its lower border touches the left kidney, while its convex surface occupies the concavity of the diaphragm. It is bounded superficially, above, by the lower border of the ninth rib, anteriorly by the stomach and colon, and inferiorly by the free margin of the ribs. It is about four inches long and three inches wide. In its healthy condition, inspection and palpation furnish only negative results.

Percussion.—To determine the boundaries of the spleen by percussion, it is necessary that the patient should lie on the right side. Its anterior border is readily determined by the tympanitic resonance of the stomach and intestines. Posteriorly, where the organ comes in contact with the kidney, it is difficult and often impossible to determine its boundary. Its superior border corresponds to the line which marks the change from flatness to pulmonary resonance. The inferior is known by the tympanitic resonance of the intestine.

In disease the spleen may be increased or diminished in size. We are rarely, if ever, able to recognize atrophy of the spleen during life. In most cases of splenic disease there is neither pain nor tenderness. The only reliable physical signs of disease of the organ are connected with its enlargements. The tumor produced by the enlargement of the organ can scarcely be overlooked. Its characteristics are a smooth, oblong, solid heap, felt immediately beneath the integuments, extending from under the ribs on the left side, a little behind the origin of the cartilages, often advancing to the median line in one direction, and descending to the crest of the ilium in the other, filling the left lumbar region at its upper part. This tumor is usually movable, rounded at its upper portion, and presenting an edge more or less sharp in front, where it is often notched and fissured. According to Dr. Bright, the principal tumors which may be mistaken for an enlarged spleen are—chronic abscess of the integuments, cancer of the stomach, enlargement of the left lobe of the liver, diseased omentum, fæcal accumulation in the colon, disease of the left kidney, and ovarian disease.

Chronic abscess of the integument sometimes occurs precisely in the situation of an enlarged spleen, but it is easily distinguishable from it by the superficial character of the swelling, and by its being too soft to belong to an internal viscus.

Cancerous deposit in the cardiac extremity of the stomach sometimes gives rise to a tumor which, from its being deeper than the abdominal walls, and descending from the margin of the ribs, might be mistaken for an enlarged spleen. One of the best marks will be found in the sound elicited by forcible percussion, which, when the stomach is diseased, has more or less of a tympanitic resonance, while the tumor is harder to the feel than an enlarged spleen.

Enlarged left lobe of the liver is easily distinguished from enlarged spleen, for the margin of the tumor can be traced running towards the right, and not towards the left as is the case with enlarged spleen.

Cancerous and tuberculous enlargements of the omentum are distinguished from an enlarged spleen by the fact that they extend across the abdomen and cannot be traced backwards; they do not descend from beneath the ribs, and are rough, hard, and uneven.

Fæcal accumulation in the intestine is a source of very great difficulty in this diagnosis, for when it takes place in the descending colon, at the sigmoid flexure, the enlargement assumes very nearly the situation of an enlarged spleen, and is scarcely to be distinguished from it except by its peculiar feel, by its history, and by the result of cathartics; nor must one without the most persevering employment of purgatives and emetics, conclude that the intestines have been emptied.

The *kidney* sometimes enlarges towards the left hypochondrium, and presents a tumor very nearly in the situation of an enlarged spleen; but by tracing it back towards the loins, we shall find that its chief bulk is situated much farther back, and that it is much more fixed, so that if the patient is placed on his hands and knees it does not fall forward. By observing the rules (which I shall give you at my next lecture) for the diagnosis of ovarian tumors, you will easily distinguish them from enlarged spleen.

The Effect of Music on the Insane.—Dr. Boyd, in his nineteenth report on the Somerset Lunatic Asylum, determines affirmatively the vexed question of the propriety of amusements for the insane, and of the effect of music on the insane. He writes: "For a belief in the wonderfully soothing effects of music on the insane we have the authority of Holy Writ, in the case of King Saul; and the Greeks and Romans were equally aware with the Jews of its power. In modern times the effect which the 'Ranz de Vaches' produces on the Swiss, and the 'Reel of Tullochgorum' on the Highlanders, is well known. Music is said by Esquirol to act upon the physical system by producing gentle shocks upon the nerves, quickening the circulation. It acts upon the mind in fixing the attention by mild impressions, and in exciting the imagination by agreeable recollections. It is a valuable remedial agent, particularly in convalescence."—*British Medical Journal.*

Progress of Medical Science.

PREVENTION OF SICKNESS FROM CHLOROFORM. — A writer in the *British Medical Journal* believes that a few drops of chloroform in water, given as a drink to patients previous to their being anæsthetized, effectually counteracts the tendency to vomit, which is so annoying an accompaniment to most operations. The remedy has at least the claim of simplicity, and deserves to be tried.

NEW METHOD OF EXPELLING TÆNIA.—Dr. Lartet (*Gazette Médicale de Paris*) has tried with success the following method: He gives in one dose 20 grammes of ether, followed two hours afterwards by 30 grammes of castor oil. "The worm is discharged without causing pain, entire or almost so, and always with the cephalic end intact."

ALCOHOL UNNECESSARY IN the TREATMENT OF INEBRIATES —Dr. Day, Superintendent of the New York State Inebriate Asylum at Binghamton, says in a recent letter: "During the last ten years I have had under my care over two thousand five hundred cases of inebriety, in all its various forms and conditions. More than four hundred of these had delirium in its various stages. In the first years of my connection with the asylum for the treatment of their cases, I embraced the common error that liquor could not with safety be entirely withdrawn from the habitual drinker. After two or three years of observation, I found this was an error. * * * I found, on trial, that my patients did much better by withdrawing alcohol altogether, never allowing even alcoholic tinctures of any kind to be given. Since I have been connected with this institution (about five months) I do not think I have given one drop of alcohol in any shape to a patient. * * * A man may habitually drink his quart of liquor or more per day, as most habitual drinkers do. Confine such a man in some place and put him upon an allowance of one half his usual quantity, and he will suffer more than he will to cut him off entirely. I have tried this in a large number of cases, and have satisfied myself from actual observation."

SOLVENTS FOR CHOLESTERINE.—Dr. Buckler, of Baltimore, was consulted by a lady, who had always enjoyed good health up to the time of an attack of pain in the right hypochondrium, amounting at times to positive anguish. An examination revealed an irregular indurated tumor, felt through the walls of the abdomen, and directly over the inferior margin of the liver. The tumor was finally decided to be a distended gall-bladder filled with biliary calculi. A teaspoonful of chloroform was given by the stomach every hour while the pain lasted, and a teaspoonful after each meal for five days longer, when the tumor described entirely subsided, affording unmistakable evidence that the gall stones, none of which were found in the stools, had entirely dissolved by the use of the chloroform. An attack of the same nature as the former one coming on three months after, chloroform was again used, with the same result as before. It being desirable to administer some agent capable of controlling the cholesterine diathesis, succinic acid and peroxide of iron were prescribed as follows: ℞ Hydrated succinate of peroxide of iron, ʒ iss.; water, ʒ viss.; and of this a teaspoonful after each meal. The patient took of this six months with no recurrence of the attack, and has continued to enjoy excellent health. Three other cases treated with chloroform were promptly relieved.—*Am. Journal of Med. Science.*

ON THE INTERNAL USE OF CHLORINE WATER IN SCARLATINA ANGINOSA.—By C. C. Lee, M.D., of Philadelphia. —During an epidemic of scarlatina in Blockly Hospital, Philadelphia, the ordinary treatment seeming incapable of arresting the anginose symptoms, although the epidemic was not characterized by a specially malignant type, and the mortality in the first stage was rapidly increasing, attention was called to the efficiency of chlorine water in this condition. Eight severe cases—of twenty-three then on hand—were placed upon this treatment exclusively, as far as medication was concerned, milk punch, beef tea, etc., being continued as usual. The result of this change after the first twenty-four hours was most gratifying, for a marked improvement was perceptible in all the cases, without exception. The amelioration was first observed in the throat, where the sloughing tendency was rapidly arrested, and in the diminished inclination to coma, while the febrile symptoms and the eruption ran their course. All the eight recovered. Of the fifteen treated in the usual way, four died during the acute stage, and in two dropsical symptoms intervened during a protracted convalescence, to which they ultimately succumbed, leaving nine recoveries. In a subsequent epidemic, of twenty-one cases, twelve were selected at random, and treated with chlorine water, while the remainder were treated in the ordinary way. Of the former, two, whose symptoms were typhoid and malignant, died on the third day, without an effort at reaction, while the remaining ten made an excellent recovery. Of the latter, two died on the fourth and fifth day, with typhoid symptoms; one on the tenth day; two of kidney affection; and the remainder recovered rapidly. As is seen, the ratio of recoveries was almost two to one in favor of the chlorine treatment, and the cases were selected without reference to the severity of the symptoms: indeed, the only two cases of malignant scarlet fever that occurred, were included in this class; but the chlorine was quite powerless in arresting their progress. The chlorine water was used in several other cases, and the result was as gratifying as in the previous ones related. —*N. Y. Med. Journal.*

TAPEWORM TREATED WITH PUMPKIN SEEDS.—Dr. S. A. Williams relates the following history: A boy, six years old, had been troubled for about a year with tapeworm, segments of which had been frequently seen in his fæces. He had been treated with pink root, calomel, etc., but to no purpose. He was directed to take fifteen drops of turpentine, in the form of an emulsion, three times daily, for a week, and afterwards that two ounces of the kernels of pumpkin seeds be thoroughly ground up with sugar to a fine pulp, and sufficient mint water added to make an emulsion of twelve fluid ounces. This was taken in the morning, between six and seven, in divided doses, upon an empty stomach. At nine A.M. two tablespoonfuls of castor oil were given, and at eleven A.M. the usurper rapidly beat a retreat before the advancing foe, and twenty-one feet, *head and shoulders*, were carefully bottled up; since which time the boy has rapidly gained in health and spirits.—*Chicago Med. Examiner.*

BURNS.—The profession is indebted to Dr. Gross for the introduction of white lead and linseed oil in the treatment of burns. It is one of the very best applications that can be used; effectually excluding the air, and being always grateful to the patient. In all cases, no matter whether merely the skin or the deeper structures are involved, white lead rubbed up with linseed oil to the consistence of paste or paint, and placed on with a brush, will be found productive of great relief. There does not appear to be any risk from the

constitutional influence of the lead, though it has been suggested, to counteract any tendency of this kind, that the patient should occasionally take a little sulphate of magnesia.—*Dr. Agnew, in the Medical and Surgical Reporter.*

Sea-Sickness.—Dr. E. Andrews, in a letter to the *Chicago Med. Examiner*, states that persons subject to sea-sickness often take a voyage with entire comfort after taking the following prescription: Ten grains of blue mass the night before embarking; follow it the next morning with a brisk cathartic of Seidlitz powder. A voyage at sea is almost always constipating in its effects, and a repetition of the medicine once or twice on the passage may be necessary.

A New Anæsthetic.—Dr. S. P. Yandell, Jr., alludes to a new anæsthetic, the properties of which have been lately investigated by Dr. Smith, of London. He has administered *tetrachloride of carbon* with happy results in a variety of cases. It is inhaled, at intervals, to the extent of a drachm, and though the effect is transient, he has seen relief follow its use in headache, dysmenorrhœa, chronic metritis, and hay fever. He has also used it in labor, and found it a safe and valuable means of mitigating the pains, without apparently hindering the natural efforts. In some cases of labor, it induces a quiet sleep, and removes for a time the efforts of exhaustion of the nervous system. In many respects, Dr. Smith deems it preferable to chloroform—quite as safe, pleasanter to inhale, and producing the effect desired in smaller quantities.—*Atlanta Med. and Surg. Journal.*

Removal of Stone from Female Bladder by Dilatation—Dr. W. B. McGavran was consulted by a patient, who for two years previously had suffered from stone in the bladder. An operation being determined upon, the patient was put under the influence of chloroform, a sponge tent removed from the urethra introduced about an hour previously, and the little finger passed into the bladder to be reassured as to its size. The index finger was then substituted for the little finger, and by steady and continued pressure the urethra was dilated sufficiently to introduce a pair of forceps and seize the stones. After three trials, with the index finger in the vagina behind the stone, it was removed. There was but little laceration of the parts, and the patient recovered perfectly. The stone measured one and a quarter inches in length by seven-eighths of an inch in diameter, and weighed one hundred and fifty-six grains.—*Western Journal of Medicine.*

Several Recoveries from Tetanus have been recently put on record. Tobacco-juice applied to the wound (one case); Fleming's tinct. aconiti (two cases, a mare and a boy); acid. hydrocy. dil. (one case, a horse); and the extract of calabar bean (two cases); were the agents employed.—*Edinburgh Med. Journal, The Veterinarian, Braithwaite*, vol. liv.

The Relative Advantages of Lithotomy by the Median and the Lateral Methods.—Dr. Thomas Markoe has a very interesting article in the *New York Medical Journal* for April, 1867, on Median Lithotomy, with a report of twenty-three successful cases.

He believes that the advantages which the operation presents are—1st. The incision being in the median line of the body, does not encounter any large vessels, and must therefore be less liable to hæmorrhage than the lateral or bilateral operation. 2d. The incision being in the median line, and not reaching as far back as the veru montanum, cannot injure the seminal ducts, and therefore produce emasculation. 3d. With the finger in the rectum, the course of the knife can be most precisely appreciated, and ordinary caution only is necessary to avoid wounding the gut in the first plunge of the knife. 4th. There is no danger that the incision may fail to reach the bladder. 5th. The deep perineal fascia not being invaded by the knife, deep infiltration of urine cannot occur. 6th. The prostate, not having been divided, retains its sphincter power, and the urine does not flow from the bladder except at the will of the patient.

Mr. Holmes Coote (*Lancet*, Feb. 2), who advocates the lateral method, holds that, in the unfortunate cases, the causes of death depend but little on the casualties attending the operation. They proceed from the all-pervading influence of morbid changes in important parts, such as the kidney, and upon the organism generally. The median operation has been tried at St. Bartholomew's in various ways, but none had appeared to him to possess any claim to superiority over the lateral operation. The operation of lithotrity is best suited for calculi of medium size, occurring in persons otherwise healthy, in middle or advanced life.

Mr. W. F. Teevan (*Brit. and Foreign Med. Chir. Review*, Jan. 1867), arrives at the following conclusions: 1. When lateral lithotomy is performed, the stone ought always to be cut out, and not torn out. 2. That the median operation is not justifiable for the extraction of calculi which are upwards of half an inch in diameter; for if such sized stones be removed by that process, obliteration of the orifices of the ejaculatory ducts and permanent impotence will result.

Poisoning by a Bee-sting.—Dr. William O'Doniel, of Marion, Georgia, was called at 10 A.M. to see a gentleman of feeble constitution, who, about half an hour previously, had been stung by a bee on the right ear. The sting was immediately removed, after which the patient was troubled with nausea and occasional emesis, which continued to grow worse. After careful examination, found patient irrational, heart's action much enfeebled, breathing exceedingly difficult and stertorous, profuse flow of saliva, face considerably swollen, body partially covered with dark spots, extremities cold. Ordered sinapisms to extremities, morphia one-quarter gr, brandy and water *pro re nata*. In an hour the patient could speak rationally, and complained of a most excruciating pain in the epigastric region, chilly sensation, burning in fauces, and incessant nausea. By 4 P.M. patient was up, but much exhausted, and recovered completely.—*Atlanta Med. & Surg. Jour.*

Poisoning by Acetic Acid.—A case of this rare accident recently occurred to a man forty years of age, who according to accounts, took, while intoxicated, two or three ounces at a single draught for suicidal purposes. The patient was shortly afterwards admitted to Guy's Hospital.

The following is an abstract of the lengthy case: Within the first hour the symptoms were slight collapse and laryngeal obstruction, which was so severe as to lead to cessation of respiration, but was at once relieved by tracheotomy. The lips and tongue were not at all charred or inflamed. Some six hours subsequently reaction was complete; there was inability to swallow, with great thirst. On the following day the patient could swallow liquids, but had pain at the fauces, and considerable salivation. On the third day the tracheotomy tube was taken out, without any subsequent impediment to respiration. No symptoms of gastric, pulmonary, or cardiac disturbance arose. Indeed, divesting the case of the laryngeal complication (which, perhaps, would not have arisen had the man been sober when swallowing the acid), we find the symptoms were

simply slight collapse, an inability to swallow during one day, and thirst and salivation; but it must be borne in mind that the result was in all likelihood modified by the early and copious administration of magnesia suspended in water.—*Lancet.*

Inoculations of Melanotic Matter.—M. Goujon has lately succeeded in producing melanotic deposits in rabbits by inoculating the matter taken from a tumor of that nature removed from the axilla of a patient. If subsequent experiments confirm the results obtained by M. Goujon, a reconsideration of our views as to malignant growths will become necessary.

A New Styptic.—An exchange says that the perchloride of iron combined with collodion is a good hæmostatic for wounds, the bite of leeches, etc. To prepare it, one part of crystallized perchloride of iron is mixed with six parts of collodion. The perchloride of iron should be added gradually and carefully, to prevent the evolution of excessive heat, which injures the collodion. The composition, when well made, is of a yellowish red color, perfectly limpid, and produces on the skin a yellow pellicle which retains great elasticity.

Fermented Mare's Milk in the Treatment of Phthisis.—At a late sitting of the French Academy of Medicine, Dr. Stahlberg, physician to the factories of Sorga in the Oural, read a paper on the efficacy of *koomiss*, or fermented mare's milk, in the treatment of pulmonary diseases. Its good effects can only be explained by its producing a diminution in the secretion of the mucous membranes or a better nourishment.

Chloroform in Obstetrics.—Sir J. Y. Simpson gave as his opinion, at a meeting of the Obstetrical Section of the British Medical Association, that chloroform never caused convulsions, puerperal mania, hæmorrhage, or delay of labor. "He gave it as soon as weariness from pain occurred, during a pain, and always with the patient in a recumbent position."

The Cause of Osteomalacia.—M. Drivon, after several analyses, has concluded that in osteomalacia the presence of lactic acid and the lactates in the bones, by acting as solvents of the phosphates and carbonates, is the cause of the softening.

Ingrowing Toe-Nail.—Dr. Bailey (*Leavenworth Medical Journal*) having observed that the pressure of the second toe against, and rather beneath, the great toe, is the source of the whole trouble, has devised a bandage for the relief of the difficulty. He takes "a piece of strong muslin, about one inch wide and just long enough to make two loops (by sewing), one large enough to slip over the great toe, and the other to slip over the third toe and bring them close together, letting the second toe rest over or above the bandage." In this way he gets the pressure required to crowd the soft parts away from the nail, and at the same time removes the pressure which caused the disease. This bandage may be easily worn, even when the boots or shoes are ordinarily tight.

Foreign Body in the Urethra.—Dr. Charles Washburne, House-Surgeon N. Y. Hospital (*Medical Gazette*), recently extracted, in the case of a patient with a stricture just under the pubic arch, about one and a half inches of a No. 6 elastic bougie, which was broken off beyond the stricture, after having been introduced with difficulty by another physician. Dr. W. resorted to the following ingenious device: "The patient was etherized, and a strong needle passed through the walls of the urethra from below and behind the stricture into the fragment of the bougie, which was moved along the urethra, and after a little difficulty through the stricture, to a point where it could be reached by a polypus forceps introduced through the meatus." No bad symptoms followed, and after the patient's discharge from hospital, dilatation was resumed.

Wounds produced by the Chassepot Projectile.—Dr. Sarazin, of Strasburg, has made some experiments on a corpse at close quarters, with the following results: 1st. The diameter of the orifice made by the bullet entering the body, is not sensibly larger than that of the projectile. 2d. The diameter of the orifice by which the bullet leaves the body, is from seven to thirteen times larger than that of the projectile. 3d. The arteries and veins are cut transversely, retracted and gaping; the muscles torn and reduced to a pulp. 4th. The bones are smashed in a manner out of all proportion with the dimensions of the projectile. To sum up, the wounding effects present a remarkable intensity, and it is well to note that the balls, after passing through the body, pierced two one-inch planks and buried themselves deeply in the wall behind.

Ascites dependent on Hepatic Lesion; Operation of Paracentesis twice performed; followed by Peritonitis;—Cure.—Dr. de Faria, Professor of Clinical Medicine, reports the following case:

José, African, bachelor, twenty years of age, free, a stone-cutter by trade, and an inhabitant of the parish of San Pedro Velho, on the 11th of March of the current year, entered the Infirmary of San Francis during my term of service. On examining the patient I remarked a general condition denoting a progressing cachexia; on exploring the belly an enormous swelling was discovered, on percussing which I determined great peritoneal involvement and complication. I likewise detected in the right hypochondriac region a firm hard body sufficiently well pronounced, where, though with great difficulty, I determined by palpation the liver much augmented in volume, and extending far above the borders of the false ribs. Respiration was not sufficiently accelerated in the vertices of the lungs, and was quite indistinct at the bases, where marked signs of vesicular congestion were apparent. The heart showed nothing abnormal in its action, save an unwonted celerity in its rhythm, and an unusual soft sighing near its base, dependent no doubt on an alteration in the blood. The inferior extremities were œdematous; the pulse was weak and frequent. I instituted at once drastic purgatives and decided diuretics; and directed a dietetic regimen, graduated to suit his failing digestive powers—such as chicken, bread, and a small quantity of wine for dinner. The enormous enlargement increased so rapidly as to become minute by minute a horrible inconvenience to the poor man, impeding ordinary repose, and absolutely forbidding sleep; and his countenance portrayed so much suffering and anguish that I determined to perform the operation of paracentesis. For the reasons given above, I performed the operation as soon as the day following his entrance into the hospital. A very large quantity of a peculiar serum was evacuated. Afterwards I continued, during my month of service, my therapeutical remedies without stint; yet notwithstanding all I could do, the liquid reproduced so rapidly that on the 19th day of my month, a new puncture was necessitated; and on the 20th day unequivocal signs of acute peritonitis appeared. I forthwith commenced to combat this with calomel in small doses, and opium, with mercurial frictions, etc. The inflammation subsided after a few days, and from that date I began to administer the perchloride of iron, in conjunction with a mild diuretic and sudorific, composed of cream of tartar, nitre, and the alcoholic extract of aconite. From that date until the day

of his departure, well and sound, I continued this treatment; having, however, to these therapeutical means added a generous reparative diet.—*Gazeta Medica da Bahia, 10th June*, 1867.

Epilepsy conjoined with Congenital Phymosis.—Congenital phymosis has been observed in eleven of twenty-five consecutive male cases of epilepsy admitted at the infirmary. That such a frequent complication should hitherto have remained unnoticed can only be explained by the circumstance that epileptic patients seldom come under the eye of the surgeon, and that physicians usually neglect to examine the sexual organs. The effects of congenital phymosis on the system are usually disregarded, although there can be little doubt that this malformation has a considerable pathological importance. There is always an accumulation of serum between the prepuce and the glans in such cases, and herpes and balanitis may be the consequence. This irritation often leads to great sexual excitement about the period of puberty, and to masturbation, with all its consequent evil effects; frequent emissions of semen at night may also be traced to the same cause. A variety of cerebral symptoms may then be induced, such as pain in the head, giddiness, noises in the ears, eructations, sickness, etc., which, where they depend only on this condition, may be entirely removed by circumcision. Whether actual epileptic fits are ever the result of phymosis, seems doubtful; yet the propriety of operation in cases of that kind cannot be questioned, as all sources of inflammation should, on principle, be removed in convulsive disorders. Several of these cases which were admitted at the Infirmary, have been operated on by Mr. Solly and Mr. Spencer Wells. In no instance, however, have the fits ceased immediately, consequent upon the operation, so that a relation as between cause and effect could not have existed between phymosis and epilepsy. Yet, Dr. Althaus said, it generally seemed as if the convulsive disorder, after circumcision in such cases, yielded more readily to the remedy employed than it did before.—*London Lancet.*

Hermetic Seal.—A mixture of gelatine and glycerine is liquid while hot, but on cooling it becomes solid, retaining considerable elasticity and toughness. The neck of a bottle dipped into this melted compound is covered with an air-tight cap, which can be made as thick as desired by repeating the operation.

Preserving Sulphuretted Hydrogen in Solution.—At the last meeting of the Pharmaceutical Society of Paris, M. Lepage brought forward a process which he has adopted for preserving solutions of sulphuretted hydrogen. Instead of using water alone, he saturates a mixture of equal parts of pure glycerine and water with sulphuretted hydrogen gas, and uses it in the ordinary way. None of the reactions are in the least interfered with, while the solution possesses almost perfect stability. The dilute glycerine dissolves less gas than distilled water will; representing the solubility in water by 100, that in glycerine will be 60.—*Chemical News.*

Artificial Milk.—Liebig recommends the following "Alimentary Preparation for replacing Human Milk for Children:" A mixture is made of 15 grammes of wheaten flour, 15 grammes of ground malt, 6 grammes of bicarbonate of potash, 30 grammes of water, and 150 grammes of milk are then added. The whole is then heated, and then stirred continually until the mixture begins to thicken. It is then taken off the fire, and stirred all the while. After five minutes it is boiled, and then strained through a fine sieve. The ground malt necessary for the preparation is easily furnished from barley malt, obtained at any brewery. It can be ground in a common coffee grinder, and then passed through a sieve. If this preparation is well made, it is as sweet as the natural milk; it is fluid enough, and keeps for twenty-four hours. In Germany the use of this food is very extensive, and its nutritive qualities are found to be excellent. It has a slight taste of flour or malt, to which children get accustomed—in fact they soon prefer it to other food.—*Chemical News.*

Glycerine in the Arts.—A German chemist, named Pusher, of Nuremberg, reported to the Trades Union of that place that he had met with great success in using glycerine together with glue. While generally, after the drying of glue, the thing to which it is applied is liable to break, tear, or spring off, if a quantity of glycerine equal to a quarter of the quantity of glue be mixed with it, that defect will entirely disappear. Pusher also makes use of this glue as lining for leather, for making globe frames, and for smoothing parchment and chalk paper. He also uses it for polishing, mixing wax with the glycerine, and using it as an underground for laying on aniline red color. The red was found to excel all others in which glycerine was not used. The glycerine has also some properties in common with India-rubber, for it will blot out pencil marks from paper, so as to leave no mark whatever. A paste made of starch, glycerine, and gypsum, will maintain its plasticity and adhesiveness longer than any other known cement, and does therefore recommend itself for cementing chemical instruments and apparatus used by pharmacists.—*Journal of Applied Chemistry.*

Chemical Calculus.—Sir Benj. C. Brodie, Professor of Chemistry in the University of Oxford, in a lecture "On the mode of representation afforded by chemical calculus as contrasted with the Atomic Theory," assumes as his unit that portion of ponderable matter which at the melting point of ice and at a pressure of 760 millimetres of mercury, occupies a space of 1,000 cubic centimetres. To denote units of chemical substances, he uses Greek letters as symbo's, and in such a manner as to indicate that nitrogen, phosphorus, chlorine, bromine, iodine, and several other so-called elementary substances, are compounds containing hydrogen, in combination with unknown elements. It is claimed that this system shows there are three, and perhaps four, fundamentally distinct classes of elemental bodies; the first may be represented by hydrogen and mercury; the second by oxygen and sulphur; the third by nitrogen and chlorine. The only novelty in this classification is the grouping together of elements of widely differing "atomicity." What advantages may be gained by assuming that substances not yet decomposed are compounds, and using symbols of volumetric units as a more mathematical form of expression, the author has not yet satisfactorily shown.

Effects of Alcohol on the System.—Dr. N. S. Davis (*Chicago Medical Examiner*), in a series of sphygmographic observations in regard to the above, has concluded, in the first place, that the presence of alcohol in the blood diminishes the rapidity of nutrition and disintegration, upon which depend the functions of elimination, calorification, and innervation. In other words, alcohol is a positive organic sedative instead of a diffusive stimulant. In the second place, the alcohol itself acts in the system exclusively as a foreign substance, and as such is ultimately excreted or eliminated without chemical change.

A Double Femoral Artery complicated an operation for ligation—the second case on record—at the Richmond Hospital, London.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by

WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & Co. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, December 2, 1867.

MEDICAL AUTHORSHIP.

"A GOOD book," says Milton, in his beautiful essay on the Liberty of Unlicensed Printing, "is the life-blood of a master-spirit, embalmed and treasured up on purpose to a life beyond life."

It is unfortunate for the cause of science that more of the pure and noble ambition that inspired the great poet to labor over a decade of years on the epic that has immortalized his name, is not felt by the skilful and laborious medical profession of America. It is unfortunate that, amid the rush and din of a growing republic, even our men of science have been forced to labor so much for the meat that perisheth, and have sought so little the bright, though distant, rewards of fame.

It is unfortunate for the progress of the American profession itself, that, amid the first material development of the nation, they have thus been compelled to minister so exclusively to the needs of the living, that little time or strength has been left to appeal to, or to seek for glory from generations yet unborn.

But this national exigency, at least in the Eastern part of the country, has in a measure passed away, and the forty thousand physicians of America are no longer without excuse, if either a love of duty or a love of fame does not inspire them to erect a higher and severer standard of medical literature.

We have passed through a stage of our material growth; we have levelled the forests, built our houses, and opened our highways; we are sure of bread for ourselves, we are sure of it for our children; and, if we can turn awhile from the race for wealth, we may bequeathe to the hereafter something purer, richer, and more enduring than mere physical comforts.

To speak plainly, the day has come when the profession should labor less for money and more for science. We should cease to be mere mechanics, working only for hire, and should rise to the level of scientific thought, philosophy, and authorship. We cannot do this without sacrificing a few pieces of silver. But is a man worthy of the profession who will not risk this much? "Science is a harsh mistress," said Sir Humphry Davy, when the youthful Faraday asked to be his assistant. "She gives but small pecuniary rewards. Consider well before you leave your prospect of wealth as a merchant for the poverty that awaits the servants of science."

Faraday left his store, however, and entered the laboratory, and created an era in the history of civilization. This is the spirit, this the enthusiasm that inspires us in this land far too little.

To raise the standard of medical authorship is a duty every right-minded physician owes to himself.

A distinguished medical professor, whose works have long been standard on both sides of the Atlantic, once said to us that he never felt that he "really knew any subject until he had written upon it." The oft-cited words of Bacon, "Writing makes an exact man," are preëminently true of all scientific attainments. We can never thoroughly know any subject until we have first thoroughly learned our ignorance of it; and one of the very best ways to gain a measure of our own ignorance is to attempt to teach others.

We speak advisedly when we say that any young man who carefully and studiously writes or lectures on any department of science, will make greater progress in five years than another man of equal ability can do in twenty-five years without the use of his voice or pen.

Our ideal of medical rhetoric is most criminally low. It seems to be a common impression, even among those whose education should have taught them better, that the detailing and representation of cases, and all scientific writing generally, is wholly a mechanical performance, and requires no special rhetorical training or study. The error is a most serious one, and makes itself felt in the hideous compositions that load the tables of every editor of a medical journal.

We have a right to speak plainly here. There is not a medical college that does not have one or more professors who ignorantly teach erroneous styles of grammar and rhetoric; there is not a class that graduates from any of these institutions one quarter of whose members can prepare a paper on any subject that shall be, both in thought and style, a credit to themselves and to the cause of science; there is not a medical journal that is not forced to publish articles that must be revised, sentence by sentence, before they appear in print; there is not a medical society whose members are not more or less oppressed by diffuse and shambling addresses.

The effect of the almost universal prevalence of a low standard of our medical writing and speaking has recoiled banefully on the estimation in which the profession are held by the community. The impression prevails, even among the educated classes, that medicine is an art and not a science, and that its disciples are mechanics, and cannot be scholars. The ranks of the profession are swelled by a great army of Ishmaelites, who, wandering over the earth, by some luck or chance happen to stumble into "doctoring," and who feel

about as much scientific enthusiasm as do the Patricks who lay the pavement, or the "bulls and bears" in Wall street.

Our literary institutions send to our medical schools, with a few slight exceptions, those whom they endured or hated, rather than those whom they loved and honored; the fools and the drones, rather than the gentlemen and the scholars; the leaves that have been shaken off before the maturity of graduating was reached, rather than the fairest and best of their perfectly riper fruit.

There are, indeed, already in the profession—and we are glad to see that each year is adding to their number—a few of as true, as pure, as noble and aspiring souls as ever connected themselves with any cause, but as yet they are hardly enough to leaven the great mass of ignorance and mediocrity.

We received the other day from a very faithful, earnest gentleman in the profession, an article on a subject of great interest, which included some exceedingly interesting observations, but which contained so much that was irrelevant, and was prepared throughout in such utter defiance of the laws of grammar and rhetoric, that we were compelled to return it to its author, with the request that it should be entirely remodelled.

Whoever says that scientific writing is a very easy or indifferent matter, is either a genius or a fool. In the accurate observation of causes, symptoms, and results of disease, in making the philosophical deductions from established facts, by rejecting the irrelevant and considering what are essential; and in presenting these facts and conclusions in a style at once simple, clear, and interesting, there is room for the display of the best faculties of observation and judgment, and as wide a range for the exercise of rhetorical genius and ability as in any other form of literary composition.

"Genius," says Ruskin, "seizes right hold of the heart of a subject." The same is true of all with cultivated talent. Ability in composition does not come by accident. It does not come by genius unless it be accompanied with patient industry. It does not come by academical or collegiate education. It comes by the patient study of the best models, by faithful and repeated practice. Indeed, success in this, as in other fields of effort, comes through repeated failures.

Furthermore—authorship is a duty that physicians owe to their profession. The obligations that all practitioners owe to science are greater than they can ever repay, however sincere may be their gratitude. It is through a long line of authors that we have inherited all that we know in the various departments of medicine and surgery. It is to medical authors that we are indebted for the garnering up and treasuring of the accumulated experience of more than twenty centuries. It is by the teachings of medical authors that many of the best discoveries and improvements of science have been suggested and inspired. It is, in a word, by authorship, more than by anything else, that the practice of our day is more rational, more discriminating, and more successful than that of Hippocrates and Galen.

While it is true that very much is published in our journals that ought never to see the light, it is still more true that much valuable experience is lost to the world, perhaps for ever, for want of a trifling amount of literary ability and enthusiasm on the part of the observer. A great deal that is rich and suggestive in medical practice dies in the various circuits of our country practitioners, and is buried with them in the same grave.

To record this experience, and to transmit it to the future, is not a matter of choice. It becomes a solemn and imperative duty. The hour a graduate receives his diploma and enters the ranks of the profession, that hour he consecrates himself to science; and so long as he continues in her service he is bound at least to obey her one great command: "Go and teach what you learn to every member of your own profession." The sweetest, purest, noblest things in the profession of modern times, and that which redeems its many bickerings and envyings, its occasional bigotry and narrowness, is the universal *esprit de corps* that makes the discoveries and experience of the individual the common property of all. The feeling with every pioneer is, "This is not *my* invention, these are not *my* experiments; they are the property of Science, and I am to bring them as grateful offerings into her temple."

But there are those who may not be influenced by appeals to love of duty. For these we must descend to a lower level, and, with the old Romans, plead with them to do right, for the love of glory. Amid the harassments and drudgery of daily practice can there be anything more sustaining than the reflection that we are toiling not alone for this little circle of patients about us, but for the misery and distress everywhere; not for the brief day of our personal activity, but perhaps for all coming time.

This may be a lofty ideal, and few there are who shall attain unto it. But there is a world of wisdom in the advice that Dr. Dwight loved to give, "*Aim high*, for you will be sure to come short of your aim."

But we descend to a still lower level, and appeal to necessity. It is only by writing that young men of our time can hope to rise to high position. It is fast becoming true of America, as it has long been true of Continental Europe, that only authors can become authorities. "What has he written?" is the question first asked of a candidate for a professorship in Berlin, Paris, or Vienna. With us it has been the custom to inquire, "What influence can he bring? who are his bankers? what is his income-tax?"

But we are happy to say that a new era is commencing to dawn on the science of America. The time will soon be past when any man can be bolstered up into scientific greatness, and held there by friendly props and stays. The time will soon be past when

the professional standing of any man will be solely or chiefly estimated by the carriages he drives, the dress of the patients that crowd his waiting-rooms, or even by his mere mechanical skill.

The time is already past when any man can hope to rise to be authority in any department of medical science through any royal road of social influence, political manipulations, or even of personal charms. Those who are to be the leaders and guides of medical science for the coming generation must earn their position by persistent, original investigation, and by faithfully recording their experience in the permanent literature of the day.

It is the pen and not the lancet, the scholar and not the mechanic, that is to guide and shape the scientific future of America.

THE attendance of students at our colleges is not, on the whole, so large as was at first anticipated, and thus far there is no increase over last year. What we lack, however, in quantity, is amply compensated for in quality, and the various institutions have reason to congratulate themselves upon the fact that so large a number of well-informed and properly-prepared students have enrolled themselves as matriculants. We have reason to hope that eventually the medical student of old will be effectually and permanently replaced by his more accomplished and perhaps more civilized brother. The time is even now at hand when it is next to impossible to distinguish any student of medicine from an accomplished and well-bred gentleman; the proverbial cane is going out of fashion, the straggling locks have been shorn, and all the other eccentricities of the bygone "Sawbones" have ceased to be. We have reason to believe, in spite of this change, that our students will work as hard and progress as rapidly as they did formerly.

A PLAN for instruction in special departments of medicine is about being inaugurated in Boston, which, if fully carried out, will doubtless be productive of much good in extending the limits of medical education. The idea is to furnish young graduates and practitioners opportunities for perfecting that knowledge of the healing art which the rapid advancements in science have placed beyond the ordinary college curriculum. On general principles, there is every reason why the project should meet with success, and we should like to see similar institutions in all our large cities.

The profession in this country should commence to develop its resources more than it has heretofore done, and endeavor to prove in a practical manner that it is not always necessary to go abroad in order to familiarize ourselves with the higher walks of the healing art. But aside from the gratification of a natural and commendable pride in this matter, the teachers have another responsibility to discharge, that of ministering to the wants and requirements of those who are unable to spend any time abroad, and who, if they were, are too imperfectly acquainted with the French and German to render such a sojourn profitable or edifying.

The school in question has a good faculty, the majority of its members being men of distinction in the different departments which they are to teach.

Reviews and Notices of Books.

THE PHYSIOLOGY OF MAN: DESIGNED TO REPRESENT THE EXISTING STATE OF PHYSIOLOGICAL SCIENCE AS APPLIED TO THE FUNCTIONS OF THE HUMAN BODY. By AUSTIN FLINT, JR., M.D., Prof. of Physiology and Microscopy in the Bellevue Hospital Medical College, N. Y.; and in the Long Island College Hospital, etc., etc. Alimentation, Digestion, Absorption, Lymph, and Chyle. New York: D. Appleton & Co. 1867. 8vo., pp. 546.

A LITTLE over a year ago we took occasion to notice somewhat in detail the contents of the first volume of a series upon the Physiology of Man, by Prof. Flint, Jr. We are now called upon to bring before our readers a cursory review of the contents of a second volume, and reiterate our satisfaction at the manner in which the task which he has taken upon himself has been performed. The intention of the author is to furnish at such intervals as are consistent with careful study and investigation, four volumes upon the different departments in physiology, and, if possible, to make each part complete in itself. The first volume treated of the blood, circulation, and respiration, and was well calculated, by the manner in which the subject was dealt with, to prepare the profession for a just appreciation of the second of the series now before us.

The subjects of alimentation, digestion, and absorption, have necessarily an interest attached to them commensurate with the importance of their functions in the preservation of animal life; but, strange to say, works on physiology generally, have not been accustomed to give them that prominence and detail of treatment which all practising physicians acknowledge they deserve. For the present efforts of our author in supplying this deficiency, his professional brethren must necessarily be under obligations. The different subjects are handled with care, discretion, and ability; while the amount of study which has been required to personally acquaint himself, as he claims to have done, with all the numerous authorities mentioned throughout the work is difficult to estimate. Such a course for a practical teacher and author cannot be too highly commended, and must of necessity add that weight to his statements, and give that force to his conclusions, which nothing short of a rightful determination to do his duty could. But not only have the older authorities been carefully perused, but recent writers have been studied, and all the late and most important discoveries are brought up to date.

The first section of the work, treating of alimentation, is very complete and systematic. The remarks upon hunger and thirst are full of suggestive and practical facts, and cannot fail to interest the reader. The description of the proximate principles, of course inevitable, will perhaps be read more than chapters on those subjects ordinarily are, on account of the many well digested ideas concerning their physiological actions which are plentifully sprinkled throughout the text. The relations of the different alimentary substances to each other, their proper mode of preparation, and their relative value, are fully presented. The account of the cereal grains in Chapter III. is elaborately given, while

the remarks upon the different beverages in Chapter IV. give evidence of much careful analysis and studious elaboration. His views upon the different stimulants are eminently sound, and in keeping with those advanced by most of the leading authorities. Alcohol, then, is not considered as an aliment in a physiological sense, its principal effect upon the economy being the production of a certain amount of nervous exaltation, which passes off as the article is eliminated, together with the diminution of exhaled carbonic acid gas, and the discharge of other excrementitious materials, the principal among which is urea. The argument to prove that alcohol does not increase the capacity to endure severe and protracted bodily exertion, is not as specious as it might be made by a less absolute reliance upon the testimony of Dr. Hayes, of the Arctic exploring expedition. But while one may find fault with the line of argument, the conclusions of the author will be accepted on grounds already well established.

The physiology of digestion is considered under the appropriate headings of salivary, gastric, pancreatic, biliary, and intestinal. While each subject is treated almost exhaustively, and all the important experiments recited and commented upon, no new conclusions as to the functions of either of the foregoing secretions have been arrived at; the saliva converts starch into sugar; the gastric juice (together with its accompanying acidity, due, as the author thinks, to free lactic acid) digests the albuminoid substances; the pancreas takes care of the fats; the intestinal juices help along the saliva in the conversion of the starch; the bile, though acknowledged to be a secretion of vital importance, is still, as regards its function, wrapped in tantalizing mystery.

The consideration of digestion from a mechanical point of view is very complete and satisfactory, and especially is this the case with the remarks upon deglutition and the movements of the stomach. In the latter connection we cannot forbear our hearty commendation of the manner in which the function of vomiting is handled. The interesting and valuable experiments which are detailed, are conclusive. In them we learn that the diaphragm is the principal agent in vomiting, and that this muscle is aided by the abdominal muscles, the muscular coats of the stomach being at the time relaxed. These facts have been long ago established to the satisfaction of physiologists, but we do not recollect to have seen them so succinctly and comprehensively put before.

Absorption is most elaborately discussed, and although many facts of value are given, they are hardly sufficient to divest the article of tediousness. But this is, after all, nothing more than the general reader expects from an enthusiastic physiologist.

The book as a whole is an admirable one, and is even a decided improvement upon the first. The interesting feature of the work is a recital of typical experiments, which are timely and judiciously introduced to impress the facts upon the mind of the reader. It is printed in elegant style, and may be considered a model in the typographical line.

Manual Compression in Aneurism.—Mr. Thomas Bryant, of London (*Lancet*), has succeeded in curing a large aneurism of the popliteal artery by manual pressure, in twenty-four hours.

The Society for the Prevention of Cruelty to Animals (London), has voted the sum of twenty-five pounds to the Richardson testimonial fund, in consideration of his discovery of the method of producing local anæsthesia.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Oct. 23, 1867.

Dr. H. B. Sands, President, in the Chair.

Dr. A. Clark presented a specimen of tumor of the brain for the sake of bringing out some points connected with diagnosis. The chief features of the case he then read as reported by Dr. C. Young, the House Physician of Bellevue Hospital.

SOME POINTS CONNECTED WITH THE DIAGNOSIS OF TUMOR OF THE BRAIN.

Elizabeth Lambert, æt. 33, a native of Wales, widowed, admitted July 25, 1867. When admitted, patient was in a very exhausted condition, and had to be carried to a ward. She stated that she had lived for some time in Charleston, and had been attacked at different times by the miasmatic fevers which prevail there. She gave a history of tubercular family taint. She had had several children, had never contracted chancre, and gave no history of secondary syphilis. She had recently been discharged from Charity Hospital, where she said she had been treated for phthisis. Patient said that she had been subject to violent headaches for the past fifteen years, but that her general health had been good till last Christmas, when she contracted a cold, and suffered from dyspnœa, palpitation of the heart, and spitting of blood. She had no cough. She had suffered from night-sweats, had lost flesh and strength.

At time of admission she complained of nothing but weakness. Face pale, pupils natural, pulse feeble and rapid. On percussion there was slight comparative dulness on right side. On auscultation nothing abnormal was discoverable beyond feeble respiratory murmur and prolonged expiration on both sides. No increase of vocal resonance. Heart sounds were healthy. No disease of liver or spleen could be diagnosticated, urine normal. Shortly after admission she began to complain of severe neuralgic pains in the head, more especially on the left side and at the back. This was treated with quinine in large doses, when she recovered sufficiently to be up and "go out on pass." Her improvement continued for about three weeks. About October 1st, she again began to suffer with the pain. There was ptosis of left eyelid, and there was a slight ecchymosis of the integument around it. The pupil was somewhat dilated and did not respond to light. There was some tenderness of the supra-orbital nerve. There was no facial paralysis, and the tongue was protruded in the median line. The right eye was natural. She complained of a terrible pain also at back of her head. For about ten days previous to death she had occasional vomiting. The bowels had to be moved by medicine. The pulse was slow, sixty-four, and regular. The pain did not yield as before to quinine, and she was at last put on large doses of iron, with iodide of potassium in large doses, on suspicion of there being a cerebral tumor. She died October 22.

Autopsy thirty hours after death.—Rigor mortis well marked. The calvarium was removed, and the dura mater found to be adherent on the left side, posteriorly. It was carefully removed, when there was found a large tumor adherent to dura mater, hard, and occupying a deep depression in the left hemisphere of brain. The brain-matter was so much softened that it could not be removed, and the exact relations were thus destroyed. The lungs were found to present the appearances of subpleural emphysema. Aorta was slightly atheromatous, as it is given off from heart. Heart healthy; liver, kidneys and spleen healthy.

The main point in the case being pain on the left side and at the back of the head, Dr. Clark had remarked to the House Physician, at the time his attention was first drawn to the patient, that the cause of the symptom was to be referred either to the existence of miasmatic neuralgia, or to a tumor of the brain probably syphilitic in character. He was then informed that the patient had previously been an inmate of Bellevue, and had been treated by quinine for neuralgia, and that she had shortly after gone out relieved; and she being re-admitted with the same pain on the 1st of October, the doctor was inclined to take the view that it was miasmatic, and he held to that opinion until his faith in it was shaken a few days before her death. The death was sudden, occurring on the 22d inst., and nobody knew the precise circumstances attending it.

On being informed of her death, the professor was much surprised, as he had seen her the day before with her intellect clear and motor power good, she having at that time no evidences of organic disease of the brain. When, however, he was told that shortly before her decease there was noticed a little ptosis of the left eye, with some ecchymosis, he was forced to change his view of the case, and pronounce the cause of death as tumor of the brain.

On making a post-mortem examination, a tumor was found growing out from the dura mater, and pressing into the substance of the brain at the posterior extremity of the posterior lobe of the cerebrum. The hole into which the tumor was imbedded was large enough to receive half a hen's egg. Although there was considerable softening in the neighboring brain substance, there was none at that precise point.

The pulse was slow during the latter part of her life; at sixty, and perhaps rarely above that. Her mode of death, however, was a point to which he wished to call the attention of the Society, in the hope of obtaining some explanation for the association of the symptoms referrible to the left eye, with the tumor on the brain. In a word, how could a tumor in this locality produce a contraction of the pupil, ptosis, and ecchymosis of the eye referred to? The other eye was reported sound.

As to the nature of the tumor, as no microscopical examination had as yet been made of it, nothing but conjecture could be offered. It might be of tuberculous or fibrous character.

Dr. Flint asked if the softening was in any proximity to the origin of the third pair of nerves.

Dr. Hamilton did not think it was necessary, in order to make out a distinct connection between cause and effect, to suppose that the origins of the nerves in question were involved, and referred to some observations recently made by Brown-Séquard, in which it was proved, that nerves more or less remote from the seat of brain-disease were affected, and this without any cause that could be explained on the score of nervous communication, save reflex action.

Dr. Jacobi thought that the sudden death might be explained on the supposition of the existence of centric apoplexy, as he noticed that the brain had not been cut into.

Dr. Clark remarked that it was designed not to examine the brain farther until it had been exhibited to the Society.

Dr. Jacobi also suggested that some explanation of the direct cause of death might be found in the upper part of the spinal cord.

Dr. Clark stated that the case, to his mind, was one which, so far as it was investigated, could give no clue for the formation of a correct diagnosis before death.

Dr. Jacobi thought that this difficulty was increased by a knowledge of the fact that the paralysis of the levator oculi, and of the radiating fibres of the iris, were respectively due to different causes.

In answer to a question from Dr. Flint, Dr. Clark stated that the heart was not fatty.

Dr. Hamilton, in reference to the question of sudden death, reminded the Society of some observations made by Dr. Flint some years ago, bearing upon effusion into the arachnoid of the fourth ventricle as the cause.

Dr. Flint remarked, that since the time those observations were published, he had reason to reject them as without value, more especially as subsequently the subject of uræmia had been studied.

BIRTH OF CHILD A YEAR AFTER OVARIOTOMY.

Dr. Cutter, in rising to exhibit some serum removed from an ovarian cyst, took occasion to refer to a case of a lady twenty-four years of age, from whom he had removed a year before a multilocular tumor of the left ovary. She made a very rapid recovery, and on the 8th of October was delivered of a healthy female child without difficulty. He knew of but few cases where pregnancy followed after such an operation, and none in which it had occurred so soon after. Mr. Spencer Wells, out of 228 cases, had met with only eight or ten pregnancies.

The serum presented was removed from the left ovary of a lady thirty-four years of age. The tumor had been growing for ten years, during which time she had two children, and was now pregnant with the third; at the time of the tapping she was quite large, and the amount of fluid withdrawn was seventy pounds. She suffered no inconvenience from the tapping, although she had commenced to refill rapidly. As she was advanced seven months, the question arose as to whether it was best to induce miscarriage or allow the case to go on.

EPULIS OF UPPER JAW.

He also exhibited an epulis of the upper jaw removed from a female. The growth, when it first made its appearance, resembled, by all accounts, a collection of sprouting granulations, due, as the patient believed, to the irritation of wearing a badly fitted set of teeth. In the course of three months it grew to a considerable size and became pedunculated. It was removed in the usual way by the saw and gouge, the attendant hæmorrhage being controlled by the persulphate of iron. The tumor was examined microscopically, and no traces of malignancy were found, notwithstanding that the gross appearances of the mass were at least suspicious.

INTERESTING EXPERIMENTS WITH LIGATURES.

Dr. B. Howard exhibited three specimens of ligation of the carotid arteries in the sheep, by different ligatures and in different manners, and made, in connection therewith, the following remarks:

A patient came to me with an axillary aneurism, and as immediate compression was, under the circumstances, impracticable, I thought of no other method of treatment save that of ligation of the subclavian. The condition of the artery, I apprehended, would not allow of ligation in the ordinary manner, by the silk ligature, and I thought if ligation were to be performed at all, it must be by the metallic ligature. We know that it is as generally accepted as taught, that the metallic ligature takes up its residence quietly wherever it is placed. Before proceeding, however, to perform such an operation, I thought it would be better to confirm these teachings first by experiment.

I accordingly obtained a very strong sheep, and applied a silver-wire ligature to the common carotid, and fastened it by twisting it very tightly. Fifty-six days afterwards, I cut down through the cica-

trix, and found that the collateral circulation which was established was very complete, and that the capillary circulation was not great; so that by making the section, which was, by the by, a vivisection, there was very little hæmorrhage. On coming down to the point of ligation, I was very much astonished to find what appeared to be a good-sized aneurism. I concluded, although I could detect no pulsation, that it was a dissecting aneurism; the ligature having perhaps caused ulceration of the middle and internal coats of the vessel. I removed it, and on section I was rather surprised to find what you here see—that this sac was an abscess full of inspissated pus, the pus having been in larger quantity than when I removed the tumor, as is manifested by the plications of the pyogenic membrane. It occupied a space of about four lines on either side of ligature, beyond which points the plugs were intact for about seven lines. In the centre of this abscess lay this ligature, with the middle and lining coats of the artery completely sloughed away and detached.

Here is another specimen removed from a pretty strong sheep. I applied a leaden ligature this time, and had it rather large, in order to avoid its cutting through. I tied it tightly, and, apprehensive that the sharp twisted ends might possibly produce some mechanical irritation, I sought to avoid it by securing the ends with perforated shot, they then being cut off smoothly. Twenty-six days afterwards, I cut down through the cicatrix, when instantly a pellet of pus appeared in the incision, as if propelled from behind. I made another incision, when the ligature and shot immediately followed it. As I proceeded towards the original site of the ligation, the hæmorrhage was exceedingly great—almost equal to that produced by dissecting through erectile tissue. I ligated above and below, and then removed this portion with the abscess which I present. There had been a good deal of inflammation around the artery, and there was considerable fibrinous material effused in the neighborhood. When preparing this specimen, I came to a point which I thought was no part of the tumor, but was misled; for, by continued clipping with a scissors, I came down to a part which was exceedingly dense, and, cutting that, a little opening was revealed, through which a piece of whalebone has been passed, and through which the ligature had ulcerated its way to the surface. On making a longitudinal section of this artery, I found it perfectly occluded, and well plugged on its cardiac and distal aspect. Between the proximal end of the distal plug and the distal end of the cardiac plug, was apparently an abscess containing about a drachm and a half of sero-purulent fluid; otherwise, the clot was perfect. The points of interest in this specimen are the great amount of irritation and inflammatory action that occurred about this metallic ligature, and that through the consequent excessive deposit of fibrine the ligature, shot and all, had worked its way, arriving nearly at the cicatrix of the integument.

I imagined that perhaps the kind of ligature was not the only consideration which should claim attention, and I obtained another sheep, to the common carotid of which I applied a silver-wire ligature, tying it incompletely after the manner of the silk ligature; but I was very careful to tie it loosely. I tied it tight enough only to diminish the canal of the artery to a considerable degree, but avoided, as nearly as I could judge, a complete closure.

On cutting down afterwards upon the cicatrix, I could scarcely discover whereabouts the ligature had been applied, so small was the amount of irritation it had produced. The plug in this case was more perfect than in either of the preceding cases. There was no abscess, the fibrinous deposit being just sufficient to cover the ligature. There was, on making the section, just a drop of something in which my friend Dr. Rogers, who has examined several specimens for me, thought he found one or two globules of a doubtful nature. At all events, the inflammatory action was exceedingly slight, only enough to be serviceable. The result, so far as occlusion, extent, and firmness of the plug are concerned, is very much better than in either of the other cases.

I am very unwilling, at present, to make any deductions from these experiments. They form only a small part of a series which I have in progress, each with a different ligature applied in a different manner. So far as these experiments go, other things being equal, it seems to be demonstrated, 1st, *that the metallic ligature does not always reside quietly where it is placed.* The last experiment demonstrates, 2d, *that it is not always necessary for complete occlusion of the artery to tie the ligature so tightly as to divide the middle and internal coats.* 3d. The last experiment is very suggestive, that a silver-wire ligature applied so loosely as to produce no lesion of the artery, nor even to completely arrest the circulation, may suffice for the cure of aneurism, when an ordinary ligature would be rendered inexpedient by the condition of the arterial coats.

Dr. Hamilton thought that such experiments as those detailed by Dr. Howard were particularly called for at this time. A great many trials, it is true, had been made with the ligature, but none as yet to test the relative value of the different kinds, more especially of the metallic. It was not strictly correct that the plan of applying the ligature for rupture of the middle and internal coats was absolutely necessary to success, as there were instances in which the old flat ligature accomplished occlusion without any such injury to the interior of the vessel. He was, however, much interested in knowing whether the metallic ligature had the additional advantage which was usually claimed for it over the silk. He was not fully convinced as to how much the sloughing was due to the different kinds of ligature, and to the different means that were taken in tying them to guard against undue irritation. He expressed a hope that the doctor would leave the points of his ligatures, in future experiments, entirely without the wound.

Dr. Bozeman, by invitation, referred to a case in which a ligature was applied, as in the third experiment of Dr. Howard, upon a human subject About three months ago he was called upon to apply a ligature to the carotid for aneurism of the temporo-maxillary artery. The ligature was applied with the same view as in the experiment referred to, and tied precisely as Dr. Howard had applied his, the idea being to effect *complete apposition* without rupture of the internal coats of the artery. The wound was closed in the ordinary way, and there was union by the first intention.

In answer to a question from Dr. Hamilton, he stated that he attributed the small amount of irritation which followed not so much to the ligature as to the manner in which it had been applied.

In this connection he referred to some experiments upon dogs which had been performed some forty years ago by Dr. Levert, of Mobile. Twelve or fifteen ligations had been performed upon the carotid—silver, gold, leaden, silk, grass, and hair ligatures had been used. He thought that in every instance in which the metallic ligatures were used they had become entirely encysted, there having been not a single instance of separation, and the occluded portions of the artery having been in from three to six months reduced to a cord.

Dr. Howard wished to state that experiment No. 3 differed essentially from the case related by Dr. Bozeman in this, that the canal was only diminished, not closed, as in the patient referred to.

Dr. Post thought that it had been the general impression among surgeons, that since the small ligatures came into use, and were so tied as to rupture the internal and middle coats, there was less danger than formerly from secondary hæmorrhage. The idea was to court union of the ruptured surfaces of the coats before the ligature should have a chance to ulcerate through.

Dr. Howard remarked that this principle was true with regard to the divided ends of arteries as in stumps, but when the ligatures were applied in the continuity of the vessel, as in the treatment for aneurism, they were liable to ulcerate their way prematurely through, and give rise to subsequent hæmorrhage.

Dr. Markoe thought that two surgical questions were involved in these experiments—the one had reference to the occlusion of the artery and the coming away of the ligature, the other to the obliteration of the vessel and allowing the ligature to become encysted. In the former case it seemed necessary that the process should be a rapid one by the rupture of the coats, while in the latter it was no question of time whatever, all that seemed necessary being the approximation of the opposed internal coats, leaving the obliteration to go on gradually.

Dr. Peaslee considered that the degree of tightness of the ligature was the question at the very foundation of the inquiry. It had long ago been settled by Dr. Knight, of New Haven, that an artery like the femoral could be occluded by digital compression kept up continuously for forty-eight hours. This, of course, proved that rupture of the arterial coats was not absolutely necessary to secure such an end. He believed that the degree of tightness of the ligatures alone produced the slough, and it mattered not what kind of material composed the thread, the silver wire being no more innocuous in that respect than the silk cord.

Dr. Sands, in this connection, referred to an operation performed by one of the surgeons of the New York Hospital. The case was one of popliteal aneurism, for which the femoral artery was to be ligated. The vessel was exposed in the usual way, when the thread was passed around it, and the ends passed through two perforations of the skin apart from the original incision, and tied over a roll of lint. The wound was then closed. He did not remember the details of the subsequent treatment, but he knew that very soon after the operation the patient had pretty severe inflammation, that the pressure had to be let up, that the pulsation returned in the tumor, and that the final result was the death of the patient from diffuse cellular inflammation.

In reply to a question by Dr. Howard, if Dr. Bozeman or any member present was aware of any record of the same kind of experiments as those presented, Dr. Bozeman replied he was not aware of any except those he had stated.

Dr. Markoe referred to a case of ligation of subclavian for aneurism reported by Mr. Porter, of London. The ligature was tied over a probe outside of the wound. At the end of fifty-six hours the patient was doing well.

The Society then adjourned.

Dr. Guillan, who was lately called in by Napoleon, declined any fee, saying that "the honor was sufficient for him." However, $2,000 were sent to him; but he made a present of the whole amount to the Academy of Medicine.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, November 6, 1867.

Dr. Alfred C. Post, President, in the Chair.

STATISTICAL MEDICINE.

Dr. Thoms read a paper upon the above subject, accompanied with a large number of diagrams, plans of inquiry, etc., which, as compilations, exhibited no little care and labor. He dwelt at length upon the representative value of figures as expressive of *exact* knowledge, and urged the necessity of care in the collection of our individual facts. These became important when grouped together, particularly since statistics were supposed to advance from facts to conclusions. The statements of a general observer were not of course entitled to as much credence as those of him who was prepared to corroborate every assertion with a fact ready at hand.

He thought that the subject was really more important than generally supposed, as honestly compiled statistics constituted the very foundation of science, and that every figure was endowed with a certain power of its own, even more significant than a printed page. The doctor also insisted that the study, although at first somewhat barren of interest, led us into correct habits of thought, and taught a proper discrimination in regard to the relative bearing of one fact upon another.

Dr. Bibbins, as indicative of the importance attached to the subject by "the Medical Society of the State of New York," referred to the terms of "the Brinsmade Prize," which at the last session of the Society was awarded to Dr. Franklin Hough. This called for a plan adapted for the tabulation of hospital reports, records of practice, etc. He could not but compliment Dr. Thoms upon his efforts to awaken the profession to the importance of the subject, appreciated perhaps only by those who were called upon to tabulate a great many facts, whose value was chiefly numerical. The obstetrical wards of any of our large hospitals furnished an example of the necessity of properly arranged tables, by suggesting to the investigator "what to observe." These tables, as economizers of labor, would prove a virtual boon to the profession, particularly to that portion, who, from the pressure of private practice and public duties, were compelled to note their facts on the instant. In London this was reduced to a system. He remembered, too, having admired several years ago, certain tables prepared in France. He was well aware that in the hospitals the young men would be likely to oppose the innovation, but when convinced of its labor-saving and time-economizing capacity, they would gladly second the endeavors of their superiors to test the measure.

He would also call attention to the importance attached by all readers of the secular papers to the data published by the Health Board. Dr. B. then concluded with a tribute to the author of the paper, as being entitled to congratulation for having presented the subject in so practical a form.

Dr. Herzog, while appreciating the efforts of Dr. Thoms, could not but regret that he had omitted from his plan all reference to condition of the soil and atmospheric influences. He deemed no plan perfect which did not provide for such observation, and would embrace every opportunity to urge upon his brethren the necessity of this, especially in the study of zymotic diseases.

Dr. Harris remarked upon the significant value of natural phenomena, and alluded to the labors of Pettenkoffer. He also referred to the very exhaustive manner in which the subject of moisture in the soil had been studied at Munich and Berlin, but as a whole, he

thought that temperature changes did not exert as much influence as was generally supposed.

He agreed with Dr. Thoms, that we should accurately state and analyze our facts, and concluded with some remarks upon the advantages to be gained by a greater attention to detail in the filling up of the death certificates, according to the form prescribed by the Health Board. He thought that the chief obstacle to accurate observation in these cases consisted in not appreciating the relationship between the disease and the sequelæ. Not phthisis, for instance, but pneumonia, an intercurrent complication, might terminate the life of the patient. Bright's disease of the kidneys and diphtheria might destroy, while the exanthematous poison was still in force.

KINGSLEY'S PORTABLE GAS BLOW-PIPE.

DR. POST exhibited a blow-pipe, invented by Prof. Norman W. Kingsley, of the New York College of Dentistry, which possessed the advantage of being worked by a thumb-pipe regulating the supply of gas and the volume of the flame. It was also capable of turning the flame in any direction, while one hand was free to control the object held; the flexible tube which constituted a part of the apparatus could be attached to any gas-pipe or burner, while the current of air was supplied by the mouth. a bellows, or in fact any power for such purpose.

DR. POST regarded the invention as especially serviecable in heating cauteries, in which case a small flame can be directed upon a given point of the metal employed.

In reply to a query of Dr. Budd's, concerning the relative merits of this apparatus and the ordinary blast-lamp, he was of opinion that the former had the advantages of simplicity, convenience, and a greater range of application.

A TRIBUTE TO THE MEMORY OF THE HEROES OF THE U. S. ARMY AND NAVY MEDICAL DEPARTMENTS.

DR. HARRIS prefaced the following resolutions with a tribute to the zeal and self-forgetfulness of the surgeons of the army and navy during the prevalence of the cholera and yellow fever epidemics.

Resolved, That this Academy view with peculiar satisfaction the honorable record of constant and heroic devotion to professional duty by the medical officers in the U. S. Army and Navy at all the stations where yellow fever prevailed during the present season.

Resolved, That to the memory of the medical officers and other physicians who have sacrificed their lives at posts of duty in the infected districts, this Academy hereby orders the names of these, our lamented brethren, to be publicly read before it at its anniversary meeting, to the end that the same may be entered upon the records in connection with these resolutions.

Resolved, That these resolutions be published in the medical journals of this city. Carried.

A GOVERNMENTAL INQUIRY INTO THE CAUSES OF THE LATE YELLOW FEVER EPIDEMIC.

DR. HERZOG presented the following, with the request that they be tabled until the next session of the Academy, since the lateness of the hour precluded discussion.

Whereas, From the earliest history of the country, the maritime regions of the Southern States have been visited by epidemic yellow fever, which on some occasions has been as destructive to life and to commerce as any epidemic recorded in history, and

Whereas, The essential nature of this disease, the question of its endemic or epidemic character, the laws of its origin and propagation, and the measures proper for its prevention, have never been investigated by the methods of modern science, and

Whereas, The Scientific Commission for the investigation of Asiatic cholera, organized by the Bavarian Government, has attained such results in exact knowledge as have brought that disease in great degree under sanitary control. Therefore

Resolved, That the Academy of Medicine will use its influence and solicit that of similar scientific bodies in aid of the appropriation by Congress of a sufficient sum, and the appointment of a commission to consist of men qualified in every department of natural science involved in such inquiry, to whom this subject shall be referred for investigation and report.

The Academy then adjourned.

Correspondence.

THE QUESTION OF PRIORITY.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—In your number of October 15th, Dr. W. E. Vermilye asks for the insertion of a "few words in relation to the question of priority between myself and Dr. Taylor, in relation to the construction and use of the short splint in hip diseases."

This subject was so completely settled by my first letter in the *Medical Times* of 1861, and reprinted in the RECORD of October 1, 1867, and the dates therein given, that I confess myself somewhat surprised at the remarks he makes.

He says, "If I understand the matter," thereby admitting the doubt whether he does understand it or not, "Dr. Sayre has raised a *false* issue, both in his letter of July, 1861, and in the one recently published."

It certainly is very remarkable that this false issue was not discovered for *seven years* either by Dr. Taylor or Dr. Vermilye, as it has been published extensively to the profession, and applied in public at Bellevue Hospital *with a cross-piece and joint at the top*, and with a *branch* to take the adhesive straps from the *inside* of the thigh, in December, 1860, some months before Dr. Taylor constructed his instrument, and which, he says in his paper, he showed to me in February, 1861.

The instrument is labelled "Sayre's" by the instrument-maker, in order to distinguish it from others. As this whole matter is, however, a mere question of dates, which Dr. Mason's letter settles so completely, I hope I shall be spared from again coming before the profession on this subject.

LEWIS A. SAYRE, M.D.

Since the above has been in type, Dr. Sayre has received the following note, which will speak for itself:

NOV. 18, 1867.

PROF. L. A. SAYRE.

Dear Sir—In answer to your inquiries I beg to state, that in December, 1860, I made a short splint for the Commissioners of Public Charities and Corrections. I also made one about that time, or before, I believe, for a poor patient of yours in the Tenth avenue, near 50th street, New York. I have no entry of the latter case in my books, as I did not charge for the splint. Both of these splints had a branch to take the plaster from the inside of the thigh, and also a short cross-piece to go partially around the pelvis, and connected with the splint by a ball and socket joint.

I should have written to you earlier, but it was necessary for me to see Dr. E. Mason, to be sure of the date

that these splints were made. You may perhaps remember that the doctor was your assistant in Bellevue Hospital in the fall of 1860.

I am very respectfully,
W. F. Ford.

THE WASHINGTON UNIVERSITY.

To the Editor of the Medical Record.

Sir—In your issue for this month there is a notice of Washington University, in which my name, by some means, has been printed C. L. Ford. I should probably not have noticed the error had not Dr. C. L. Ford, of Ann Arbor, Michigan, addressed a communication to Rev. Dr. Bond, President of the College, which would indicate that he thought the person alluded to was himself—since he is of the impression that the faculty has been but recently organized, and the College not yet in operation. Very respectfully, etc.,

A. J. Foard, M.D.,
Prof. Anatomy, and Dean Washington Univ.

47 Liberty st., cor. Lexington,
Baltimore, Nov. 26, 1867.

New Instruments.

DR. D. H. GOODWILLIE'S INHALER.

We present a description of a simple, safe, efficient, and economical apparatus for the administration of all

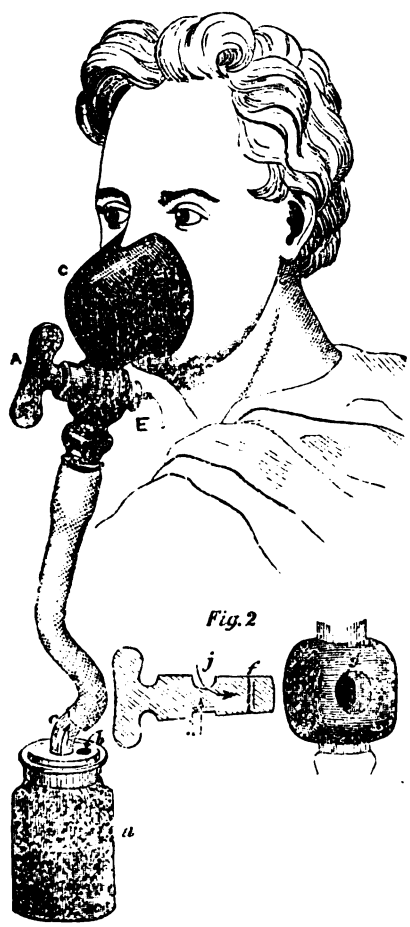


Fig. 2

the anæsthetics and medicated vapors, invented by Dr. D. H. Goodwillie of this city.

This inhaling apparatus, manufactured by Tiemann & Co. of this city, consists of a face piece (C), connected with it a faucet (A) which contains the inhalation-valve (Fig. 2, *h*) for the passage of the vapor, and exhalation-valve (*f*) for the escape of the expired breath, and a fresh air-passage (*g*), with an index to show the amount of vapor and air being inhaled at any time during the administration. The inhaler is connected by a flexible tube to the bottle (*a*) containing a sponge, and half filled with the anæsthetic fluid to be used. Air is admitted by a tube (*b*) to the centre of the sponge, to evaporize the fluid on the upper half of it during the inhalation. The inhalation-valve and air-passage are of the same caliber, and divided by the index into five parts. The revolution of the faucet over the inhalation-valve and air-passage controls the inhalation of vapor and air. Figure 1 on the index shows the minimum amount of vapor, and 4 the maximum amount. The fifth part is always fresh air. Revolving the faucet from 1 to 4 increases the vapor and decreases the air. 4 to 1, *vice versâ*. All the vapor can be shut off and fresh air admitted without removing the inhaler from the face. For example, let the faucet be revolved to 2 on the index, then two parts of vapor and three parts air are inhaled. The gradual inhalation accustoms the air-passages to the vapor, and thus produces less spasm of the epiglottis, coughing, struggling, and sickness, and narcotism is quietly produced and easily maintained. By this apparatus the administrator has full knowledge and control of the vapor inhaled. A great saving of chloroform or ether is effected, as the vapor from the bottle passes direct to the lungs, and is mixed with air at the will of the administrator by the faucet.

This apparatus can be applied to the inhalation of all the anæsthetics and medicated vapors.

Obituary.

PROFESSOR WORTHINGTON HOOKER, M.D.,

New Haven, Conn.

The profession throughout the country has been called upon to mourn the untimely removal by death of one of its most widely known, cherished, and active members. Engaged in the practice of his profession for a period of forty years, and winning by his literary talents a reputation in early professional life, he became identified with two generations. His life affords an illustration of what any physician can make himself by arduous labor and fidelity of purpose. Although practising the art which he loved so well up to his death, he always found time and opportunity to devote himself to the fascinations of literature, both within and beyond the pale of his profession. No one in our ranks has enjoyed a success in the circulation of publications greater than his. This is particularly the case with several minor works upon scientific matters, designed for schools and colleges, among which may be mentioned, "The Child's Book of Nature," and his "Physiology for Colleges and Schools." Both of these have been extensively adopted by the various institutions of learning throughout New England. His first work was entitled, "The Physician and Patient," and so well was it written, that he laid by it the foundation-stone for an enviable literary reputation. His contributions to the medical journals were varied, practical, and valuable, and on two different occasions he was awarded a prize for medical essays by the American Medical Association. He was everywhere distinguished for his affable and generous nature, and raised for himself hosts of friends whose hearts are now painfully sad over his departure.

Born in Springfield, Mass., in the year 1805, he was sixty-two years of age at the time of his death. He graduated at Yale in the class of 1825. In the same class were President North of Hamilton College, Governor Ford of Ohio, Chief Justice Thomas Slidell of the Supreme Court of Louisiana, Hons. George W. Woodruff, Thomas H. Bond, William B. Bristol, Abijah Catlin, and Dr. N. B. Ives. He commenced the study of medicine in the Harvard Medical School immediately after graduation, and, upon the conclusion of his studies, in 1828, he established himself in practice in Norwich, Conn., where he remained until 1852, when he left for New Haven to accept the Professorship of Theory and Practice in Yale College. He continued in connection with that institution until his death, distinguishing himself as a teacher and an advocate for the elevation of the standard of medical education. The interest which he took in this latter subject manifested itself in many praiseworthy efforts before the American Medical Association, and caused him to be looked to as one of the radical pioneers in the advancement of the interests of the brotherhood.

In 1830 he married Miss Mary Ingersoll, of Springfield, who died shortly before he left Norwich. Subsequently he united himself to a daughter of the late Governor Edwards, who survives him.

Added to his other graces was the exalted one of a consistent Christian, he being for many years a prominent and zealous member of the Congregational denomination, and an active worker in the Sunday-school department.

In his decease a vacant place is left in our ranks which cannot be easily filled, but he has left us an example by which all can profit, and we need hope for nothing better than that our last end may be like his. His eloquent tongue is silent, his accomplished pen is at rest, but his ennobling record lives after him, and his memory will be kept green by the thousands he has instructed and befriended.

New Publications.

BOOKS AND PAMPHLETS RECEIVED.

REPORT OF PROCEEDINGS OF THE ASSOCIATION OF MEDICAL SUPERINTENDENTS OF AMERICAN INSTITUTIONS FOR THE INSANE. 1867.

THEN AND NOW: A Discourse Introductory to the Forty-third Course of Lectures in the Jefferson Medical College of Philadelphia. By S. D. GROSS, M.D., Professor of Principles and Practice of Surgery.

WATER: A Medical Essay by SAMUEL W. FRANCIS, M.D., Physician to Northern Dispensary, New York.

PHOTOGRAPHS OF DISEASES OF THE SKIN, TAKEN FROM LIFE. Nos. 3, 4. Series I. By H. F. DAMON, A.M., M.D. Boston: James Campbell, 1867.

MECHANICAL THERAPEUTICS: A Practical Treatise on Surgical Apparatus, Appliances, and Elementary Operations, etc., etc. By PHILIP S. WALES, M.D, U.S.N. Philadelphia: H. C. Lea, 1867.

ON DISEASES OF THE LUNGS AND AIR PASSAGES, their Pathology, Physical Diagnosis, Symptoms, and Treatment. By H. W. FULLER, M.D. Cantab., etc., etc. From the Second and Revised London Edition. Philadelphia: H. C. Lea, 1867.

A TREATISE ON THERAPEUTICS AND PHARMACOLOGY, etc. By GEORGE B. WOOD, M.D., President of the American Philosophical Society, etc., etc. Third Edition. In 2 vols. Philadelphia: J. B. Lippincott & Co., 1868.

A TREATISE ON THE CAUSE OF EXHAUSTED VITALITY, or Abuses of the Sexual Function. By E. P. MILLER, M.D., Physician to the Hygienic Institute and Turkish Baths, etc., etc. New York: J. A. Gray & Green, 1867.

Medical Items and News.

THE LATE PROF. ROBERT WATTS, M.D.— *Whereas*, it has pleased an All-wise Providence to take from the scene of his earthly labors one of the oldest and best beloved members of this Society, DR. ROBERT WATTS; therefore,

Resolved, That in the death of our late associate we deplore the loss of a sagacious physician, a genial companion, and a true friend.

Resolved, That in this Society, where for so many years he found the most grateful recreation from the labors of an arduous practice, we cannot cherish too warmly the memory of his ever-welcome presence.

Resolved, That to the profession, as well as to this Society and his many friends, the exalted character of Dr. Watts as a man, his ability and self-sacrificing devotion as a physician, and his noble qualities of heart, will ever make him an example worthy of emulation and regard.

Resolved, That a copy of these resolutions be transmitted to the family of the deceased, and that they be published in the medical journals of this city.

T. M. MARKOE, M.D., *President.*
FOSTER SWIFT, M.D., *Secretary.*

At a meeting of the Students of the College of Physicians and Surgeons, held in the Hall of the College, October 18, 1867, the following preamble and resolutions were adopted:

Whereas, We the Students of the College of Physicians and Surgeons, have heard with sincere regret of the death of our Professor of Anatomy, Dr. Robert Watts, and

Whereas, We ever found in him an able and efficient instructor, a true and sympathizing friend; therefore, be it

Resolved, That, while we would ever recognize the will of an All-wise Providence, we deplore the death of one so eminently qualified by rare mental attainments, and by the naturally pleasant traits of his character, for the position, the duties of which he so long and faithfully performed.

Resolved, That we tender our heartfelt sympathy to the family of the deceased, and would comfort them with the assurance that he has left behind him many endearing fruits of a useful and well-spent life.

Resolved, That as a tribute of respect to the memory of our late professor, we, as a class, attend his funeral and wear a badge of mourning for thirty days.

Resolved, That a copy of these resolutions be sent to the family, and also that they be published in two of the New York daily papers and in two of the leading medical journals of the United States.

FRANK W. ROCKWELL,
JOHN J. PRENDERGAST,
WILLARD PARKER, Jr., } *Committee.*

DR. CARTER, an eminent physician of Charlottesville, Va., died on Thursday, November 7, of apoplexy, in the seventy-sixth year of his age. Dr. Carter graduated in Philadelphia, in 1812, and settled in Charlottesville in 1824. He had been a practising physician for fifty-five years, and was beloved wherever known for his many amiable qualities.

A PREMIUM FOR AN ESSAY ON CROUP.—The Emperor Napoleon, having lost a nephew by croup, offers a premium of 12,000 francs for the best essay on that disease.

Poisoned by Myrbane.—An inquiry was held by Mr. John Humphreys, the Middlesex coroner, at the Black Horse tavern, Kingsland-road, into the death of the wife of a tradesman living at 64 Kingsland-road. Her name was Elizabeth Masham, aged sixty-four years. On the 27th ult. she went on a visit to Mr. and Mrs. Kipple. While there she was seized with spasms, and went to a cupboard, and drank what she thought was brandy. She had made a mistake, and drank some myrbane. Mrs. Kipple said that the smell was sickening. Mr. John Masham stated that when he found that his wife had been poisoned he placed a quarter of a teaspoonful of the liquid into his mouth. His face began to glow, and his sight became confused. He then spat it out. For three days after he was dizzy. Dr. Hoskins proved that the deceased expired on Wednesday, from the effects of poisoning by myrbane. She was insensible for three days before her death. The coroner said that the present was the third case of myrbane poisoning on record. Both the other cases had come under his notice. One of them was that of a young man, who swallowed some of the poison while sucking a syphon to make it run. That occurred at a chemical factory. The other death arose from a man spilling a carboy filled with it over his clothes. In order to dry them he lay down in front of a fire, and the poisonous vapor killed him. He was found dead. Myrbane was quite a new poison, and it had been accidentally discovered by a chemist, who was making the magenta color out of coal-tar. It was used to scent oils and to give a flavor to cakes. Cheap pastrycooks bought it at 6s. to 8s. a pound, and used it instead of bitter almonds, which cost 12s. a pound. Three drops of it in a pound cake would not do damage. The jury returned a verdict, "That the deceased was accidentally poisoned by myrbane."—*London News.*

Dr. Karl Thiersch, Professor at Erlangen, son-in-law of the celebrated chemist, J. von Liebig, has accepted the call as Professor of Surgery and Director of the Surgical Clinic at Leipsic, in the place of Gunther, deceased.

Professor Lieberkuhn has been called to the chair of Anatomy at the University of Marburg.

Dr. Ignaz Ritter v. Nadherny died in Vienna on the 5th of August, in the eightieth year of his age, after a life of active and earnest labor devoted to the honor of his profession and the good of his fellow men. He commenced public life more than fifty years ago as Professor of Medical Jurisprudence in Prague, was afterwards elevated to various positions of official trust in Bohemia, and finally made chief of the medical branch of the department of Public Instruction. His labors for the public hygiene of Bohemia were stupendous; his efforts on behalf of the charitable institutions of Prague unremitting; while two generations of physicians looked up with reverential love and awe to their patriarch and nestor, Nadherny. He was untiring in his labors of love for a suffering humanity; no work was too hard, no sacrifice too great for him. Three monarchs of Europe recognized his services by elevating him to the rank of Knight, and conferring on him titles, decorations, and testimonials of every description; while in the hearts of the people he has built himself a monument of everlasting gratitude.—*Allgemeine Wiener Zeitung.*

Dr. Edmund Rose of Berlin succeeds Billroth as Professor of Surgery and Director of the Surgical Clinic at Zurich, Switzerland.

The Treatment of Infantile Paralysis.—At the regular meeting of the Paris Academy of Medicine held on the 17th of September, M. Bouvier presented from Dr. C. F. Taylor, of New York, a work entitled *Infantile Paralysis and its Attendant Deformities.* At the same time he showed to the Academy two forms of apparatus, from Dr. Taylor, one for the treatment of Pott's disease and the other for coxalgia.

"The apparatus which I have the honor to present to the Academy," said M. Bouvier, "has been on exhibition in the American section of the Exposition. It differs essentially, as may be seen, from those which are ordinarily employed in the treatment of Pott's disease. It combines all the advantages of horizontal position, while, at the same time, it gives the patient exercise and fresh air. With this apparatus Dr. Taylor endeavors to protect the diseased vertebræ, as is done in the dorsal decubitus without the aid of the instrument. Like a bed securely attached to the dorsal region, the instrument exercises on the vertebral column an equable pressure, as would result from the patient's weight when in bed. This force is uniformly anteroposterior.

"The apparatus is a simple lever, which raises the superior part of the vertebral column, by using the transverse processes as the fulcrum; so that, whilst pressure on the articulations of the transverse processes is safely increased, the pressure on the bodies of the diseased vertebræ is considerably diminished. The instrument is hinged, and acts like a supplementary vertebral column. Its arrangement enables one to appreciate exactly and to modify the degree of force employed, and to render the treatment constantly and regularly progressive. It also assists the contractions of the spinal muscles. The ability of the patient to be in the open air, while the seat of disease is protected against all shock—this constitutes the superiority of this mode of treatment.

"The other apparatus is designed for counter-extension in coxalgia. The idea of counter-extension originated with Dr. Davis (of New York), but this instrument is nevertheless the invention of Dr. Taylor. It consists, 1st, of a belt, provided with two straps, which embrace the perineum, producing extension from above; 2d, of a long extensible splint, received under the foot by a strap, which is a continuation of the adhesive straps applied to each side of the thigh and around the limb; this strap produces counter-extension.

"Elongation is accomplished by means of a lateral screw. Not only the muscular tonicity is overcome, and the articulation preserved from pressure or shock, but during locomotion the weight of the body is sustained by the instrument, because the body rests on the straps which embrace the perineum.

"The result of Dr. Taylor's experience shows that when the tonicity of the muscles of the hip is completely overcome, and the parts are guarded from pressure and shock, locomotion is not only free from danger, but, on the contrary, very advantageous, because the patient can thus profit by the potent measures which hygiene places at our disposal."—*Gaz. des Hôpitaux.*

The Present Raid on the Uterus.—The following extract from the address of Dr. W. D. Buck, before the New Hampshire Medical Society, is copied from the St. Louis *Medical Reporter:* "The uterus is a harmless, inoffensive little organ, stowed away in a quiet little place. Simply a muscular organ, having no function to perform save at certain periods of life, but furnishing a capital field for surgical operations, and is now-a-days subject to all sorts of barbarity from surgeons anxious for notoriety. Had dame Nature foreseen this, she would have made it iron-clad. What with burning and cauterizing, cutting and slashing, and split-

ting, and skewering, and pessarying, the old fashioned womb will cease to exist, except in history. The Transactions of the National Medical Association for 1864 has figured 123 different kinds of pessaries, embracing every variety, from a simple plug to a patent threshing machine, which can only be worn with the largest hoops. They look like the drawings of turbine water-wheels, or a leaf from a work on Entomology. Pessaries, I suppose, are sometimes useful, but there are more than there is necessity for. I do think this filling up the vagina with such traps, making a Chinese toy-shop of it, is outrageous. Hippocrates said he never would recommend a pessary to procure abortion, nay, he swore he never would. Were he alive now he would never recommend one at all. If there were fewer abortions there would be fewer pessaries, and if there were fewer pessaries there would be fewer abortions. Our grandmothers never knew they had wombs, only as they were reminded of it by a healthy fœtus; which, by the by, they always held on to. Now-a-days even our young women must have their wombs shoved up, and if a baby accidentally gets in by the side of the machinery, and finds a lodgment in the uterus, it may, perchance, have a knitting-needle stuck in its eyes before it has any. It is the easiest thing in the world to introduce a speculum, and pretend to discover ulceration of the os, and subject a patient to this revolting manipulation once or twice a week, when there is, in fact, nothing the matter. By some practitioners, all diseases which occur in the female are attributed to the uterus. In this class are especially to be included all such as make of the abnormal conditions of the uterus a specialty."

A Magnetic Bullet Probe.—Mr. Sylvande Wilde has invented an instrument for extracting bullets in wounds, which has been aptly called a sensitive artificial finger, for its action depends on the actual presence of the bullet sought for. It consists of two insulated steel wires, which are connected with an electro-magnet and a bell, so arranged that the electric circuit will pass through the two wires whenever they are connected by contact with the same piece of metal, which will form a part of the conductor. The points of the probe are sheathed in a sliding-tube when introduced into the wound, and are not uncovered until the supposed bullet is felt. The forceps have curved points, and are not pallets or spoons. When the ends of the probe are uncovered, on touching the bullet, the latter completes an electric circuit, which sets in motion a magnet, and by its attraction compels the forceps to grasp the bullet; it is then ready to be drawn out.

Humoral Pathology again in the Ascendant.—It is a remarkable fact that the humoral theory in pathology, which dates back as far as Hippocrates, and which was of course founded only upon bold speculation, is now emerging by the aid of science from the almost universal contempt into which it had sunk, and becoming a received dogma. We now depend upon the different emunctories, and do not attempt to extinguish the disease at the hazard of life. In a word, we "soothe and sustain," as Dr. Flint with a beautiful conciseness expresses it, while the process of purification is in progress. As defendants of the expectant school, we now fortify the system to prepare it against the assaults of an ill-conditioned militia mustered in for an emergency. —*Private Letter.*

The Female Doctor Question Abroad.—Mme. Sourkof has just received the degree of Doctor of Medicine from the University of Zurich. She is Russian by birth, and studied at St. Petersburg with great credit until the Russian government forbade the conferring of degrees in medicine upon women.

An Extensive Hospital.—An exchange states, on the authority of Dr. Nathan R. Smith, of Baltimore, Md., who has recently returned from Europe, that the city of Milan can boast of the most magnificent hospital in all Europe. It contains 2,500 beds.

The Colors of Soap-Bubbles.—At the late meeting of the British Association for the Advancement of Science, Sir David Brewster read a paper on this subject, from which it appears that he had been led to make some new investigations as to the cause of colors of soap-bubbles, after he had repeated the beautiful experiments of Professor Plateau, "On the Equilibrium of a Liquid Mass without Gravity." In these cases the colors of soap-bubbles were presented to him upon soap-films, plane, convex and concave; but the changes of form which they underwent, and their motions upon the film itself, were incompatible with the common theory of their formation. After describing various phenomena emitted by the ordinary soap-bubble, and also with the bubble having its film toughened by a mixture of glycerine, Sir David remarked that his experiments were sufficient to establish the almost incredible truth that the colors of the soap-bubble are not produced by the thickness of the film itself, but by the secretion from it of a new substance flowing over the film and expanding, under the influence of gravity and molecular forces, into colored groups of various shapes, and returning spontaneously, when not returned forcibly, into the parent films.

At the conclusion of the paper, Sir William Thomson remarked that the mechanical questions involved in the seemingly simple operation of blowing soap bubbles were the greatest enigmas to scientific men. The extraordinary expansion and adhesion combined in the vapor spheres were well worthy of the fullest investigation.

Ophthalmic and Aural Medicine and Surgery.—John P. Garrish, M.D., will deliver his introductory to a course of lectures on Ophthalmic and Aural Medicine and Surgery, at the Cosmopolitan Hospital rooms, No. 65 West Thirty-fourth street, corner of Broadway, on Thursday evening, December 5th, at eight o'clock. The profession and students of medicine are invited to attend.

Birth and Death-Rate of the World.—Statisticians have calculated that if the population of the world amounts to between twelve hundred and thirteen hundred million persons, the number of deaths in a year would be about thirty-two millions. Assuming the correctness of this calculation, the deaths each day would be nearly 88,000; 3,600 per hour; 60 per minute; and thus every second would carry into eternity one human life from one part of the world or another. But reproduction asserts its superior power; for, on calculating the probable annual births on the globe, the result shows that whereas 60 persons die per minute, 70 children are born, and thus the increase of the population is kept up.—*Lancet.*

The Sapphires of Montana.—The Montana people are congratulating themselves over the discovery of genuine sapphires in that territory. The precious stones found on El Dorado Bar are familiarly known in that locality by the name of "Collins' diamonds," and are said to be quite plentiful and easily procured.

New York Eye and Ear Infirmary.—Dr. F. J. Bumstead has resigned his position as Surgeon to this Institution.

Original Communications.

EXPERIMENTS ILLUSTRATING THE DIRECT ACTION OF HYDROCYANIC ACID UPON THE MEDULLA OBLONGATA.

By JOSEPH JONES, M.D.

PROFESSOR OF PHYSIOLOGY AND PATHOLOGY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NASHVILLE, AND HEALTH OFFICER, CITY OF NASHVILLE.

SUMMARY.—*Experiment* 1. *Effects of Prussic Acid administered by the Mouth.—Experiment* 2. *Brain of Alligator exposed, and Prussic Acid applied.—Experiment* 3. *Prussic Acid applied to Spinal Cord in tail of young Alligator.—Experiment* 4. *Prussic Acid applied to Spinal Cord, midway between Anterior and Posterior Extremities —Experiment* 5. *Poison applied to Spinal Marrow, midway between Anterior Extremities and base of Brain —Experiments* 6, 7, 8, *and* 9. *Prussic Acid applied to Medulla Oblongata.*

THE following ten experiments were performed in the month of April, 1862, at Montevideo, Liberty Co., Georgia.

A solution of prussic acid was freshly prepared, of a strength equal to that of the fresh Acidum Hydrocyanicum Dilutum, U. S. P.

For these experiments I selected ten young alligators (Alligator Mississippiensis) of the same age, and from the same nest.

Effects of Prussic Acid administered by the Mouth: Experiment 1.—Poured a solution of prussic acid, in amount about f ʒ ss., down the mouth and throat of a small young alligator. The reptile was only six inches in length, and had not left the egg-shell more than a week or ten days.

In three and a half minutes the alligator manifested signs of the action of the poison, in its staggering gait and convulsive movements; in twelve minutes, gaping and struggling violently, with spasmodic movements of the muscles; in fifteen minutes, breathes only occasionally (once every two or three minutes), and then in a spasmodic manner, lies indifferently upon the back or belly, and cannot walk; sixteen minutes after the first application of the poison, and one minute after the last observation, all motions appear to have ceased; when thrown into cold water, however, it appears to be aroused by the shock, and makes several attempts to swim and turn on its side; these motions ceased in a few minutes, and when turned over on its back in the water, it remained so, whilst an alligator whose cerebrum had been exposed, and touched with the same solution of prussic acid, remained vigorous and strong.

Twenty-six minutes (ten minutes after the preceding observation), lies as if dead, without any motion, except, every two or three minutes, a spasmodic, feeble, respiratory effort; mechanical stimuli produced but a slight tremulous motion of the muscles, whilst irritation of the muscles of the alligator whose cerebrum had been exposed and treated with hydrocyanic acid, induced vigorous respiratory motions; in thirty minutes (four minutes after the last observation), all external signs of life have vanished, and the animal appears to be dead.

Thirty minutes after the application of the poison, the thorax was opened and the heart exposed; auricles and ventricles greatly distended with blood, beating slowly and spasmodically forty times per minute; fifty-two minutes (twenty-two minutes after the last observation), action of heart, twenty-six per minute; one hundred and twelve minutes (sixty minutes after the last observation), action of heart twenty-six per minute; one hundred and eighty minutes (sixty-eight minutes after last observation), no signs of life in the muscular system; mechanical stimuli fail to produce contractions; heart still acts in a slow, spasmodic manner; the blood presents a brownish purplish color; auricles and ventricle still engorged with dark blood; action of heart, twenty per minute.

Two hundred and fifty-eight minutes (seventy-eight minutes after the last observation), pulsations of the heart still continue, they are however s ower and more irregular and spasmodic, the *rhythm* of its action has been destroyed; the auricles act continuously about ten times per minute, the ventricle not so often. The action of the heart continued to grow slower and slower until it finally ceased. The exact time was not noted.

Prussic Acid applied to Brain of Alligator. Experiment 2.—Removed the superior plate of the cranium of a small alligator (six inches in length), and exposed the superior surface of the cerebrum without wounding the large veins and arteries. The membranes were carefully removed from both hemispheres, so as not to injure the great central vessels running between the hemispheres and the cerebellum.

The surface thus exposed was moistened with the solution of prussic acid.

Four minutes after the direct application of the poison to the surface of the cerebrum, no signs of the action of the hydrocyanic acid; the surface of the brain was wounded, and the poison again applied. In eleven minutes (seven minutes after the last observation), the effects are beginning to be manifest, in a decrease of activity and life in the muscular motions: the reptile is still able to crawl about, and to make the sounds usually emitted by young alligators. The blood oozing from the wounded surface of the brain presents a brilliant crimson color.

In fifteen minutes (four minutes after the last observation), motions spasmodic, gasps for breath, and emits quick, spasmodic sounds, like an imperfect bark; these spasmodic motions ceased in a few moments. The reptile crawled off and attempted to bite the finger when placed before its head, and when thrown into cold water it swam rapidly. The effects of the poison appear to be due chiefly to its absorption by the blood-vessels of the brain, and its distribution to other portions of the nervous system, and not to a direct action upon the nervous structures constituting the cerebrum.

The poison was again applied to the exposed surface of the cerebrum, and its structures were again injured so that the poison might come in immediate contact with the nervous elements. Twenty-four minutes after the first application, still able to swim, but evidently losing power: the respiration is slow, spasmodic, and irregular. In the last application, the nervous structures were more extensively injured, and the poison more effectually applied.

The forces gradually declined, and thirty-six minutes after the first application (twelve minutes after the last observation) the alligator has so far lost voluntary motion that, when thrown into cold water, it remains indifferently upon the back or belly, as it may be placed; still breathing, but the respiration is very slow and spasmodic.

The heart was next exposed; the act of cutting through the muscles to expose the heart caused contractions of the various muscles of the thorax and fore-

limbs; action of heart thirty-eight per minute, more regular and active than the heart of the alligator in the preceding experiment, auricles and ventricle filled with crimson blood; forty-two minutes, action of heart thirty-eight.

One hundred and sixty-eight minutes after first application of poison to cerebrum (one hundred and twenty-six minutes after last observation), the reptile has greatly recovered, and is attempting to walk; heart beating with considerable regularity and force.

The remaining coverings of the superior and posterior parts of the cerebrum, especially those portions of the dura mater and arachnoid which dip down between the hemispheres, and between the cerebrum and cerebellum, were removed. Considerable hæmorrhage ensued from the large blood-vessels; this was wiped carefully away, and the prussic acid again applied to the surface of the brain, reaching the cerebellum (necessarily from the anatomical relations of the membranes removed and the large blood-vessels cut), and perhaps also in small quantities the medulla oblongata and spinal cord.

The poison acted almost immediately, producing tetanic spasms, followed by cessation of respiration and loss of muscular power.

One hundred and seventy-eight minutes after the first application, and ten minutes after the last, the action of the heart was twenty-four per minute; two hundred and fifty-eight minutes (ninety minutes after the last observation), muscles still respond slightly to mechanical stimuli; heart still acts ten times per minute spasmodically. Since the loss of blood from the blood-vessels of the brain, the heart is not so filled with blood, and continued to diminish in the size and in the frequency of action, until it ceased in about an hour after the last observation. The precise time of the cessation of its action was not noted.

Prussic Acid applied to Spinal Marrow. Experiment 3. — Exposed the spinal cord in the tail of a young alligator for half an inch, commencing just below the junction of the hind legs, and applied the solution of prussic acid used in the preceding experiments to the surface of the spinal cord; immediate contraction of the muscles and cries of pain followed the application; these, however, soon subsided and the animal became quiet. No special effect was produced upon the respiratory acts, except to render them fuller and somewhat labored.

Two minutes after the poison was again applied and produced similar results—contractions and cries of pain, and full laborious respiration. As often as applied to the spinal cord, it produced these effects—they are, however, evidently becoming less marked. Eight minutes after the first application, when thrown into cold water, the reptile swims; ten minutes after (two minutes after last observation), spasmodic attempts at respiration, gapings of the mouth and throat, and spasmodic attempts to crawl; twenty-five minutes, limbs spasmed, muscular powers feeble, lies in partial stupor. In thirty minutes after the first application of the poison, all external signs of life are extinct; when the thorax was opened, however, a convulsive motion of the respiratory muscles ensued, inflating still farther the lungs. Heart acting regularly, contracted, and not engorged with blood; the absence of the usual large amount of blood in the cavities of the heart in poisoning with hydrocyanic acid, appears to be referable to the loss of blood which ensued from the tail, which was considerable. Action of heart, thirty-two per minute.

One hundred minutes after the first application of the poison the heart ceased to beat.

Prussic Acid applied to Spinal Marrow. Experiment 4. — Exposed the spinal cord of a young alligator midway between the anterior and posterior extremities, and applied prussic acid of the same strength as in the preceding experiments; spasmodic contractions and motions of the muscles and limbs were almost immediately excited. The respiration still continued, notwithstanding several repetitions of the poison. Eighteen minutes after the application respiration still continues; twenty-two minutes, still breathes slowly, although the muscles respond but little to mechanical excitements; at the end of forty-two minutes all external signs of life were gone. Heart still acting fifty times per minute.

Prussic Acid applied to Spinal Marrow. Experiment 5. —Exposed the spinal cord of a young alligator, midway between the fore-legs and base of brain, and applied prussic acid—tetanic spasms of the voluntary muscles followed, without the arrest of respiration. Fifteen minutes after the application of the poison, still breathes and attempts to swim when thrown into water; swims with the hind, but not with the fore-legs, and appears to have lost much of the power of the fore-legs. In fifty-two minutes all external signs of life have become extinct. Heart exposed, still acting thirty-two times in the minute.

Prussic Acid applied to Brain and Medulla Oblongata. Experiment 6.—Exposed the cerebrum, cerebellum, medulla oblongata, and superior portion of the spinal cord of a young alligator (Alligator Mississippiensis)—considerable blood was lost during the removal of the walls of the cranium and vertebræ, the animal appeared exhausted, and the nervous muscular actions appeared to be influenced by the loss of blood and the violence inflicted upon the membranes of the brain and spinal cord; the motions of the animal were rendered somewhat irregular and spasmodic. A solution of prussic acid of the same strength as that employed in the preceding experiments, was applied to the nervous structures exposed, without however taking the precaution to wipe away the blood, which was continually oozing from the divided vessels. No immediate effect was produced, and eight minutes afterwards the alligator was still able to swim with precision and vigor when thrown into water. After removing the animal from the water, the nervous structures were carefully wiped dry, thus removing all the blood and water, and the poison was then applied immediately to the exposed surfaces. This last application appeared to have a more immediate and decided effect than the previous one, and in one minute spasms with convulsive cries were excited. Fifteen minutes after the first application, and seven minutes after the second application, respiration was irregular, not more than two or three times per minute, and mechanical stimuli caused but little effect upon the voluntary muscles—when thrown into the water, the animal lies indifferently upon the back or belly. In a few minutes more, all voluntary muscular motions ceased entirely. When the heart was exposed, it was beating regularly, and did not present the engorged appearance of the heart of the alligator into whose mouth and stomach the poison had been introduced (Ex. 1).

In the present case the action of the poison produced a powerful contraction of the respiratory muscles, and complete expulsion of the air contained in the lungs.

In one hundred and thirty-five minutes from the first application, the heart had ceased to beat; artificial respiration and inflation of the collapsed lungs restored the action of the heart. During the process of artificial respiration there was a partial restoration of the irritability of the muscles. At the end of two hundred and fifteen minutes all action in the heart had ceased. The more early extinction of the powers of the heart, in

this experiment than in the first, was due in great measure to the loss of blood.

Prussic Acid applied to Medulla Oblongata. Experiment 7.—Exposed the brain and medulla oblongata of a small alligator, and after wiping off the blood carefully applied the solution of prussic acid to these parts—in less than a minute, in fact almost immediately, violent convulsive movements were excited, violent expiration of air from the lungs, and death in a few moments. The lungs remained permanently collapsed and the respiratory muscles contracted. The collapsed contracted appearance of the thorax and abdomen was in striking contrast to the inflated body of the alligator killed in the first experiment by the internal administration of the poison.

Thorax opened one hundred and twenty minutes after the application of the poison; heart had ceased to pulsate. Inflation of the lungs was followed by a renewal of the action of the heart. The cessation of the action of the heart, in the two last experiments, sooner than in the two first experiments, was due to the collapsed state of the lungs, and the greater loss of blood in the latter. In the two first experiments the lungs remained inflated, and there had not been any loss of blood in the first reptile experimented on, and in the second none for some time after the commencement of the experiment.

In the present (7th) experiment, the muscles responded to mechanical stimuli after the institution of artificial respiration. At the expiration of two hundred and ten minutes, all action in the heart had ceased. On account of the loss of blood, the heart presented a pale appearance, contracted, and with but little blood in its cavities.

Prussic Acid applied to Medulla Oblongata. Experiment 8.—Exposed the medulla oblongata of a small alligator, and applied directly to the nervous structures the solution of prussic acid; convulsions, suspension of respiration, and apparent death followed almost immediately.

The air was driven forcibly out of the lungs, and the respiratory and abdominal muscles remained contracted so as to present a contracted appearance of the chest and abdomen. The heart exposed one hundred and twenty minutes after the application of the poison, had ceased to beat; it contained little or no blood, and was pale and contracted. Inflation of the lungs restored its action. Two hundred and ten minutes after the application of the poison, the action of the heart had ceased.

Prussic Acid applied to Medulla Oblongata. Experiment 9.—Exposed the medulla oblongata of a young alligator and applied prussic acid—the effect was almost immediate; in one minute the respiration was arrested, and the respiratory muscles permanently contracted. The eyes winked, and the mouth gaped for some eight minutes, and even long after the eyes and mouth ceased to move of themselves, the eyes would wink, and the muscles of the jaw would contract when pinched, Thirty minutes after the action of the poison, the heart was exposed—lungs contracted, the act of cutting excited contractions in the respiratory muscles—heart acting forty-four times per minute regularly.

It is worthy of note in these experiments, that the lungs were collapsed, and the respiratory muscles forcibly and permanently contracted only when the poison was applied to the medulla oblongata.

Prussic Acid applied to Medulla Oblongata. Experiment 10.—Removed all the skin over the cranium and spinal column of a young alligator and applied prussic acid of the same strength as that used in the preceding experiment. At the end of seven minutes the reptile still shows signs of great activity, being able both to swim and walk; at the end of eighteen minutes after the application of the poison, although manifesting its effects in loss of power and irregular movements, still it swam with vigor and precision when thrown into water. The bony wall was then removed, the medulla oblongata exposed, and the poison applied directly to its surface; the effect was evident in a few seconds, and whilst there were no well marked tetanic spasms, still the respiration ceased, as well as all voluntary motions. When mechanical stimuli were applied, reflex actions of the extremities indicated the exis ence of nervous and muscular irritability.

Heart exposed ninety-five minutes afterwards; its action was a mere tremor.

From these experiments we conclude that prussic acid acts primarily, directly, and chiefly upon the medulla oblongata and spinal cord; and that its ability to produce sudden death is dependent upon its action upon the medulla oblongata.

Derangements in the relations of the medulla oblongata and spinal cord to the muscular system generally, and especially to the respiratory system, are the first phenomena manifested in the action of prussic acid.

When absorbed from a raw surface, or from the stomach and bowels, these phenomena are manifested, as well as upon the direct application of the poison to the medulla oblongata, but more slowly. In warm-blooded animals death takes place almost immediately after the administration or inhalation of the poison; still, when taken by the mouth, a sufficient time always elapses for the absorption of the poison and its distribution to the great nervous centres. As soon as the poison in the blood reaches the medulla oblongata and spinal cord, convulsive motions are excited, and if the impression be sufficiently intense there is an immediate arrest of the action of the ganglionic cells presiding over the respiratory process, and immediate death follows.

In the young alligator the cartilaginous walls of the cerebro-spinal nervous system can readily be removed by the knife, and we are thus enabled to apply the poison to successive portions of the nervous system, and thus demonstrate the immediate and direct action of the poison upon that portion of the cerebro-spinal nervous system which presides over respiration and the reflex actions.

Prussic acid, as we have satisfactorily demonstrated by numerous experiments, acts also upon the blood, and upon the muscular fibres and the sympathetic nervous system; but, as has been conclusively demonstrated by the experiments just recorded, the most marked phenomena, and those disturbances of the respiration which induce death, are due to the direct action of the poison upon the medulla oblongata.

English Beer a Cause of Gout.—According to M. Charcot, who has been lecturing on the subject at La Salpetrière, notwithstanding the drunken habits of the lower classes in Russia, Poland, Sweden, and Denmark, gout is almost unknown among them. In Ireland, and Scotland also, where whiskey is the national drink, gout is little known. Porter and sweet cider are accused vehemently; and Dr. Ball, a distinguished *agrégé* of the French hospitals, and a naturalized Englishman, analyzes carefully, for the benefit of French *savans*, our English beer; describing *porter* as highly colored, poor in alcohol, deprived of sugar, disposed to acid fermentation, and, owing to the torrefaction of the grain, containing a principle which is, perhaps, not foreign to its effects in the production of disease. This is the fatal cause of English gout, according to these gentlemen. Gout, however, prevails most in this country amongst the classes who never drink porter.

CLINICAL PAPERS ON EAR DISEASE.

By D. B. St. JOHN ROOSA, M.D.,

PROFESSOR IN THE UNIVERSITY MEDICAL COLLEGE.

NO. II.—FURUNCLES IN THE EXTERNAL AUDITORY CANAL.

Perhaps the simplest and best classification of inflammations of the external auditory canal, is that of Von Troltsch. He divides these inflammations into *circumscribed* and *diffuse*.

By circumscribed inflammation occurring in this part we mean simply furuncles in the passage. They generally arise in connection with the existence of furuncles in other parts of the body, and are, like them, very painful. They also produce deafness by mechanically closing the canal. Tinnitus aurium—noise in the ears—a symptom which is apt to be very troublesome in almost all other ear affections, is not generally present when furuncular inflammation exists. It may be, however, after the pus from the boil has been evacuated, and some of it perhaps remains in the canal and presses upon the membrana tympani and through it upon the *ossicula auditus* and auditory nerve. The reason that the tinnitus is absent in the early stages, is of course the fact, that there is no pressure exerted upon the drum by a circumscribed swelling of the canal.

There will be no difficulty in the diagnosis, if the ear be examined by means of the mirror or otoscope, and reflected daylight or sunlight. One or more circumscribed swellings are found in the caliber of the canal. Their usual situation is a point near the tragus, on the anterior wall, and we may have two or more at a time.

The proper treatment is to make an incision at as early a period as possible, and then to continuously apply warm water, giving the ear an uninterrupted warm bath, as it were. It makes no difference whether pus or blood be evacuated by the incision. The relief following is generally immediate in either case.

The incision is best made with a sharp-pointed curved bistoury, cutting from below upwards, and not with a scalpel down upon it, as the books usually advise. The incision can be made more quickly, and does not cause so much pain, as when made with the scalpel. The ear should be syringed with warm water after the hæmorrhage has ceased.

After the furuncle is opened, and the pain caused by it has disappeared, it is well to smear the passage with some ointment, in order to hasten the softening of the indurated tissue surrounding the furuncle, but as long as pain continues the use of warm water should be persisted in. Steam may also be allowed to pass into the ear from any sort of a vessel.

Leeches do not seem to do the same amount of good in furuncular inflammation as in the diffuse form.

The vapor of chloroform has been highly spoken of, allowing it to pass into the auditory canal, but I do not know much of it by experience, having been generally satisfied with the method of treatment above indicated.

We shall probably not be done with the case when one furuncle has been evacuated, and has healed; just as in other parts of the body, one boil is apt to follow another in rapid succession.

This brings us to consider the cause of this affection. I do not think I ever saw a furuncular inflammation of the external auditory canal in a patient who was in other respects in a physiological condition. It seems to be the evidence of a wrong state of the system of some kind.

Furuncles are very apt to occur in anæmic persons. I have seen several cases where they were troublesome after parturition, during which the system had been much exhausted, and perhaps the patient had not been under the most judicious management as regards the diet. When iron was administered, and nourishing diet substituted for slops, the boils ceased to recur. Last winter I saw cases in young ladies who were zealous attendants upon the *German*, and who spent large portions of the night in the ball-room, for quite long periods. They were not particularly anæmic, but they had no proper appetite, and were evidently suffering from the effects of an improper mode of life.

Regular hours, regular times for eating, exercise in the daytime, soon relieved these cases, but those who would persist in their dissipations did not recover until the season was over. In one case there were also hordeoli or styes, which are generally regarded as evidences of mal-nutrition.

It will be seen from this, that the local treatment is by far the lesser part of our labor in these cases of circumscribed inflammation of the auditory canal. We should be very careful to inquire as to the appetite, exercise, mode of life, and *specifically* correct anything which may be out of the way. It will not be enough to give general directions, such as "You must take exercise and live well," but the amount and kind of exercise should be indicated, the time of eating, variety of food, etc.; at the same time some one of the preparations of iron will generally be indicated.

The ear should be kept from the influence of cold air, when the patient is out of doors, by cotton, or an ear-lap; but the habit of thus protecting the ears in the open clear air, where there is no draught, should be abandoned when the ear is well.

VESICAL CALCULUS.

PASSAGE OF A STONE THREE-FOURTHS OF AN INCH IN CIRCUMFERENCE, THROUGH THE URETHRA OF A BOY TWO YEARS OLD.

By WM. MASON TURNER, M.D.

PHILADELPHIA.

The case which I beg leave here to report, occurred in my practice several years ago, in the city of Petersburg, Virginia. It was given very briefly in the *Virginia and Maryland Medical Journal*. As it is an interesting case, I am induced to lay it once again before the profession. On the 29th of August, 1860, I was sent for in haste, to see a child, suffering, as the messenger informed me, from retention of urine. The case had been seen by a brother physician, who sent word that I should bring a catheter. I found, for my patient, a handsome little boy (colored) just twenty-seven months old. The attending physician, baffled in his attempts to give relief, and, moreover, called away to another case, turned the little patient over to me. He was lying on his back, moaning most piteously, his countenance betraying acute suffering. The pulse was both frequent and quick, ranging in strokes from 120 to 135 per minute.

Before proceeding to explore the region of the bladder, I was led to examine the chest, by accidentally laying my hand over the right lung, and feeling a decided vibratory thrill. On auscultation I detected a pneumonia in the upper lobes of both lungs, and in the *second* stage; as bronchial respiration, bronchophony, and dulness on percussion were well marked. Upon inquiry I learned that the child had been sick a month previous, with measles, and having taken cold when recovering, had been complaining more or less since that time.

The bladder, to which I then turned my attention, was

enormously distended, protruding and hanging over the pubic arch, resembling in miniature somewhat the *pendulous belly* of pregnant women. The epidermis in the neighborhood of the bladder was red and shining, and I feared the formation of an artificial opening. The penis was much enlarged, and seemed to be infiltrated with urine. This was not the case, however, as subsequent examination proved. To add to the difficulties of the case, there was present a congenital phymosis, rendered ten times more rigid in its contraction by the swollen condition of the penis. It was a difficult task which I then set to work to perform, that of drawing away the urine of a boy, twenty-seven months old, under circumstances of such pain to the little fellow, and of such disadvantage to myself. The swollen and phymosed condition of the penis, and the great nervous irritability present in the patient, rendered it almost impossible to make even an attempt with the catheter. At the slightest touch the child would shriek and scream, until I actually thought the strained bladder would rupture before the violent muscular contractions would relax. Finally, after much patience and considerable manœuvering, my only assistant being an old lady, who managed to hold the child's hands, I succeeded in passing a small catheter through the hard, pursed-up ring of the phymosis, and as fortune decreed it, into the urethra. This *feat* I was compelled to perform several times, for the frantic efforts of the child dislodged the catheter and made my labor abortive. However, I placed my knees upon the lower extremities of the child, and in this position succeeded in passing the instrument once more into the urethra. Moving it slowly and cautiously onward, I soon had the satisfaction of reaching the bladder, which I knew by the sudden gush of the pent-up urine through the catheter. At the neck of the bladder I noticed a slight *gritty* feel as the catheter glided along; it was transient, however, and I thought nothing of it, attributing it to the ring of a cartilaginous stricture, which I have no doubt existed. The boy was immediately relieved, and fell asleep, while the urine, an enormous quantity, was flowing. That night I prescribed simply cold cloths to the penis. The next morning I called to see the boy, and found him much refreshed and improved by a good night's rest. The belly over the bladder had lost the prominent, *bullety* appearance of the previous evening, and had assumed somewhat more its natural proportions; yet it was still very tender. The penis still possessed its look of infiltration, and resembled a lump of translucent jelly. The boy had only once voided his water, and that in a very unsatisfactory manner, screaming at the top of his voice when the urine reached the urethral canal, and refusing most positively to make further effort. The result was, on my arrival, he was again unable to urinate. Once again my little catheter was brought into requisition with success. I thought, perhaps, the rigidity of the phymosis occasioned to a certain extent, at least, the difficulty in micturition, and I determined to operate for it at once. The operation was over in a few seconds, and I then saw that the retention was in no wise connected with the phymosis. Passing the catheter into the empty bladder, for the purpose of exploration, I detected the same *gritty* feel which I had remarked the previous evening. There was no mistaking the peculiar sensation, the touch was decisive; there was a foreign body occasioning all this trouble. In withdrawing the catheter, which I had used as a sound, I felt an opposing substance, and then with my thumb and forefinger detected an irregularly rounded tubercle in the urethra. After several introductions of the catheter, the tone was successfully hooked in the fenestra of the instrument, and was cautiously, slowly, drawn forward towards the *meatus externus*. Here I was beset by much difficulty. I dared not split the urethra, and yet it was extremely difficult to get a hold on the stone, which showed a constant tendency to retrocede. After much patience, however, and considerable manipulation, the *casus belli* was drawn near the external orifice, and neatly extracted with a thin pair of dressing forceps. The boy came near swooning, but soon revived.

A further examination, using the catheter as a sound, revealed, as I had already suspected, another calculus in the bladder. Lithogenesis was hereditary, it seemed, and yet the family record did not substantiate the opinion. The following are the dimensions of the stone: Length, five-eighths, and circumference, three-quarters of an inch; weight, forty-two grains; shape, semi-conoidal and semi-cylindrical, the presenting end corresponding to the apex of the cone. An analysis determined it to be oxalate of lime.

Owing to the irruption of the recent war, I was unable to follow up this case, but will simply mention that just before hostilities began I was again called to the little patient, and succeeded in getting away, by the same means as employed in the first case, another calculus, but much smaller than the first extracted. The noticeable feature in this case is, that a stone of such remarkable size *did* pass through the urethra of a *child two years of age*.

Original Lectures.

ADDRESS TO THE ALUMNI OF THE UNIVERSITY MEDICAL COLLEGE, N. Y.

By Prof. GEORGE T. ELLIOT, M.D.

Fellow Alumni of the University Medical College—The unexected honor of addressing you this evening, at the first formal meeting of the Alumni, has been awarded to me by the committee, representing the interests of 2,631 of our number, in such a manner that it could not be declined; and it has been accepted in the spirit which prompted the offer. As a native of this city; a graduate of the literary department of Columbia College; a doctor of medicine of this University; a lecturer for several years in the College of Physicians and Surgeons; and as one of the founders and professors in the Bellevue Hospital Medical College, I represent alike those affectionate reminiscences which have called us together this evening, as well as that solidarity of purpose, interest, and responsibility in which all these colleges are embraced.

The history of the past has shown that the prosperity of one enhances the prosperity of all, and the brightest hopes for the future success of medical teaching in this metropolis grow out of the harmony of feeling, the concert of action, and the honorable emulation by which they are distinguished.

The inevitable centralization of interests, which is begotten by the laws of trade and the natural advantages of New York, had foreshadowed the commercial preeminence of this city before its wondrous development has astonished the world. While the electric telegraph, pondered over by Prof. Morse in one of the rooms in this building, has so concentrated the facilities for business operations, as of necessity to develop the future of New York beyond all possible anticipation. Those long lines of telegraphic wire are the nerves of commercial life, the various cities of the country are the ganglia, but here is the busy brain of commerce which

coördinates and directs the vast ramifications of its monetary relations.

Such commercial supremacy dwarfs, of necessity, the relative status of literary and educational enterprises, while, in reality, favoring their development in every possible way. The great rewards of professional and literary life in this country are to be found in this city; and hence the ranks of ambitious men are steadily recruited from all the States by those who have the nerve and the capacity to enter the arena and compete for the highest prizes. The great hospitals of every country are found in its principal city.

There can, therefore, be no doubt of the eventual supremacy of New York as the great centre of medical education in this country, even if the astonishing progress of the last few years had not confirmed the anticipation. It is to the medical department of the University that the honor is due of first practically developing the claims of New York to be the chief medical school of this country; although the medical department of Columbia College and Rutgers College must for ever share the honor of laboring as pioneers in the field.

The experience in teaching, and the brilliant reputation of the founders of this college, turned the tide of students to this city, made its advantages known to the South and West, and attracted larger classes to their lectures than had ever been seen in New York.

In the twenty-seven years which have elapsed since its organization many changes have occurred in its Faculty, while some, full of years and honors, have passed away from among us, and rest from their labors. It is a fitting time to recall some of those personal reminiscences which are shared by so many of my audience, and it is to be hoped that the subsequent annual addresses to the Alumni of this college may gradually supply those data, interesting at the time to those who can confirm their accuracy, and furnishing the most valuable materials for the biographer and the historian.

When I first matriculated in this college in October, 1845, the lectures were delivered in the Stuyvesant Institute on Broadway, opposite Bond street, which belonged to the Faculty, and was subsequently sold by them after they had erected the splendid building, recently destroyed by fire, in East Fourteenth street, between Third avenue and Irving place. At this time the prosperity of the college was at its height, the spacious lecture-rooms were thronged with students from all parts of the country, but especially from the South and West. The Faculty, flushed with success, full of ardor, experienced, energetic, in the prime of manhood, and well-knit together, presented in the highest degree the cohesion, the discipline, the vigor, and the enthusiasm which represent the essential conditions for the prosperity of a college.

Of all the names which challenge my attention, it is right that the first place should be given to that of Valentine Mott, then Professor of Surgery, and more widely known in this country and to the world than any American physician has ever been before or since. To lecture on Surgery was for Mott a labor of love, never completely relinquished to the close of his long life. His image rises clearly before me as he alighted from the large old-fashioned gig in which he then preferred to drive; clad in spotless glossy black, without a crease or grain of dust, he passed with his pleasant smile and slightly bowed form through the throng of admiring students to his private room.

Although a fluent lecturer, Mott was rarely eloquent, and never sought to charm his audience by any grace of oratorical display. Students and physicians went to see and hear the self-reliant man who had devised so many bold and original surgical procedures, and was so renowned for the delicacy, the skill, and the success of his operations. In the gentle, placid, smiling face before them they beheld the surgical pioneer who had left so few of the great operations on the human body to be originated by others. As secure in his knowledge of relative anatomy as the mariner in the fidelity of his compass, Mott had passed boldly on from one triumph to another, had made the crooked ways straight, and illumined the path for all to follow. His devotion to the study of surgical anatomy was such, that to the close of his active life he rarely undertook an operation of difficulty without previous reference to the cadaver.

These minute precautions with which he guarded his operations against every avertable cause of failure, the intensity of his devotion to delicacy and success in his manipulations, were the foundation of his great renown, and distinguished every thought and act of his surgical career. To him each step of an operation always involved a solemn responsibility, though he might have discharged the same duty an incredible number of times before; and such was his enthusiasm, that the ligatures which he had applied to the great arteries were carefully preserved, and even shown to his successive classes. They were as hallowed to him as the trusty weapon which the successful soldier bears back from the well-contested field.

These qualities distinguished him as a lecturer, but detracted from his success. A feeling was left in the minds of many students that these operations might fall to their lot, but could only be properly performed by such a man as Mott, separated from them by impassable barriers. And thus the very vastness of his knowledge of the subject, and his extreme desire to impart all those details which had served him so well in such trying and unforeseen emergencies, somewhat obscured the student's perception of those few indispensable indications which alone he was fitted to comprehend.

"Ah," said the late Professor Gilman to me, "I wish that I had not been prevented by circumstances from delivering a course of lectures on a certain subject; they would have been better than any that I have ever given." And when I asked him why, he replied, "Because I would not have been embarrassed by any knowledge of the subject." But the very wealth of illustration and detail in Mott's lectures which embarrassed the young student, made them of priceless value to the practitioner, and to him who had grappled with similar difficulties.

How many living men there are who can endorse the statement made by the President of the College of Physicians and Surgeons at the formal meeting of the Academy, held after the death of Dr. Mott! "I never met Dr. Mott in any case," said Dr. Delafield, "without learning some fact of practical value."

According to an old Chinese proverb, "Tall towers are known by the shadows which they cast, and great men by their calumniators." Nor was Mott an exception to the law. But their voices are hushed in the presence of the grave; and while impotent during his long life to deprive him of his just meed of honor, they have for ever ceased their objections to his rank as the greatest surgeon that America has ever produced.

In 1850, Dr. Mott's health began to fail, and for a second time he restored its tone by a visit to Europe. His place was filled by Prof. S. D. Gross, now the successor of Mütter, in the Jefferson Medical College of Philadelphia.

Dr. Gross's resignation from the University led to the appointment of Dr. Alfred C. Post to the vacant chair.

The nephew of Dr. Wright Post, whom Dr. Mott venerated as the leading surgeon of his day, long a surgeon to the New York City Hospital, an untiring student, he now fills, with honor to himself and to the College, the chair which is identified with the lives of the leading surgeons of the country.

After his return from Europe, Dr. Mott accepted the proffered rank of Emeritus Professor of Surgery in the College of Physicians and Surgeons, but subsequently resigned that position to take the same rank and title in the University, which he held to the day of his death.

Granville Sharp Pattison was one of the founders of the College, and Professor of Anatomy when I was a student. The first idea of the establishment of this school was developed in his mind by a desire to settle in New York. He came from Philadelphia to lay his plans before Dr. John W. Draper, who, more than any other man, has shaped and directed the policy of this College from the hour when he consented to undertake its organization.

Pattison was no ordinary lecturer. His strongly marked individuality stood out in bold relief in whatever surroundings he might be placed by duty or inclination. His finely marked oval face, his commanding forehead, the quiet grace of his movements, the calm equipoise of manner which marked the man of the world, at home in the best bred circles, and fitted to shine in any society, all conspired to enhance that peculiar charm which the audience felt before a word had yet been uttered.

He needed all these and other qualities to supply the deficient voice and defective articulation which marred his elocution. It often happens, however, that the physical defects of a man of marked ability enlist the sympathy of his admirers, blunt the sharp edge of criticism, and form an additional bond of endearment. Without these drawbacks, Pattison would have been a great orator; in spite of them he succeeded in teaching anatomy so clearly, and in a manner so attractive to the student, that it will always be difficult to find his superior.

One secret of his success is to be sought in the striking contrast of his style to that of Mott. The professor of surgery and the professor of anatomy in a medical school, teach the same subjects in their different relations, and often meet on common ground. Perhaps Dr. Pattison was not unaware of the relief which it gave to the student when he taught the surgical anatomy of the neck, or of hernia, in simple graphic language, which penetrated like a sunbeam into the cloudiest intellect; or when stripping the subject of all the refinements and minutiæ with which it had been draped by the great surgeon, he pointed with that ardor, that demonstration of warm sympathetic feeling for the student of which he was supremely master, to the simple anatomical details, the clear cardinal facts, which alone they need remember, and on which alone they might rely.

It was formerly the custom to open the session by a week of introductory lectures—one evening being allotted to each chair—and I well remember the impression which Dr. Pattison made on one of these occasions. These addresses were prepared with care, read from the manuscript, and requested for publication by the class. When the time came for Dr. Pattison's address, the amphitheatre was lighted up instead of the lower lecture-room, and thronged with students. The doctor made his appearance in full evening dress, with blue dress coat and pumps. Using no notes, commencing in a low tone of voice, in his peculiar enunciation, struggling with his lisp, and the difficulty that he experienced in pronouncing the letter *r*, he proceeded to show that an exact knowledge of anatomy was indispensable to the trustworthy practitioner. The hushed silence with which his remarks were received showed the sympathy of the audience for the difficult articulation, and their confidence in the power of the man. But as he unfolded his argument, and dilated with his theme, his voice rose, the listless unimpassioned manner was lost in the eagerness and ardor of the earnest advocate; all the fiery energy of his nature, the reminiscences of years of heart-inspired teaching were fused in the glowing words which brightened the beaming faces of the class, until, at last, uncovering a superb dissection of the surgical anatomy of the neck, he pointed with fingers trembling with excitement to the relations of the vital parts to each other in illustration of his method of teaching, and concluding amid storms of applause, he left indelibly impressed on the mind of every student that it was hopeless to seek for a more trusty guide.

His was the skill—

> **"To breathe the enlivening spirit, and to fix**
> **The generous impulse in the glowing breast."**

After Dr. Pattison's death, his place was filled by Dr. William H. Van Buren, whose large surgical experience in army and civil hospitals, as well as his singularly clear and remarkably well illustrated demonstrations, lent the greatest interest to his lectures.

The identification of Professor Van Buren with the United States Sanitary Commission during the Civil War, has associated his name for ever with our national history; and the official history of the commission has recorded the following testimony of his colleagues to the value of his services.

"Dr. Van Buren was one of the members of the commission to whom it was indebted for services in the early period of its history, which, when viewed by the light of experience, it would seem impossible to have dispensed with. To his eminent professional reputation, which had done so much to secure a respectful hearing of the claims of the commission at the outset, he joined a calm and sober judgment, not only of what ought to be done, but of what, with proper effort, could be done. His former connection with the medical staff giving him a thorough knowledge of the defects of the system, gave also a practical value to his suggestions of the remedy which it was impossible to over-estimate. The commission did not hesitate to follow implicitly his counsel in all his suggestions of reform measures, and the wisdom and propriety of his advice have been fully confirmed by the experience of its whole history."

Dr. Darling, who had long since resigned his position as Demonstrator, and devoted himself with ardor to professional studies abroad, a Fellow, by examination, of the Royal College of Surgeons of London, has accepted the post made vacant by Prof. Van Buren's resignation, and stands a living link between the memories of the early college days and the active duties of the present.

The chair of Th ory and Practice has witnessed many changes, and has been filled by many of the ablest men in the country. The emphatic Revere, the scholarly Saml. H. Dickson, the classic Bartlett, the learned Meredith Clymer, who served with distinction as surgeon in the late war, the practical and clear-headed John A. Swett, who has left in his work on Practice the proof of his great ability, that graceful, apt, and finished clinical teacher, Dr. John T. Metcalfe, have successively discharged the responsibilities of a post now filled by Dr. Alfred L. Loomis, who has laid in the Bellevue and Charity Hospitals the foundations of his success.

The department of Materia Medica has always been identified with Dr. Martyn Paine, whose voluminous works attest the studious habits and the earnest convictions which have distinguished his long career. The days have gone when Dr. Payne used to canter to the college on his mettlesome black horse; but though bowed by the weight of years, and led by advancing age to withdraw from active duty in favor of Professor Thompson, neither his intellectual forces, nor his interest in the college, are in any way abated.

With the obstetrical chair, the name of Gunning S. Bedford has been associated from the beginning. The remarkable success which has attended the publication of his lectures, and of his college clinic, the rapid exhaustion of successive editions, the translation of his works into foreign languages, the approbation of reviewers and of students, attest the ability which marked his teachings. Retiring from the schools, he has thus left a perpetual legacy in the published results of all his studies. In his successor, Dr. Chas. A. Budd, the alumni recognize one to whom the interests of the chair are worthily confided, and who has added to its attractions by the assignment of Dr. Jacobi to the children's clinic.

Dr. John W. Draper, now Emeritus Professor of Chemistry and of Physiology, has been the executive officer and guiding spirit of the school. Earnest but calm as a lecturer, remarkable for the aptness and profusion of his illustrations, the concentrated manner, the simplicity of style, and distinctness of argument, never suggested a thought of that exceeding grace of language and brilliancy of metaphor which rendered Prof. Draper's introductory and valedictory addresses so remarkable, and which found a congenial theme in his eulogy on Pattison. The magnetic influence of Dr. Draper as a lecturer is felt in the sentiment of reserved force with which he penetrates an audience, in the possession of such qualities as are displayed in his wonderful work on the History of the Intellectual Developmen of Europe, and in his remarkable history of the Civil War in America. Each of these might justly claim the labor of a life; but his studies have been prosecuted while giving two distinct courses of lectures, writing an elaborate work on Physiology, a textbook on Chemistry, contributing original views to our knowledge of the laws of light and their relations to the development of plants; and, among other valuable discoveries, originating the application of the process of Daguerre to the taking of portraits from life.

He thus stands a pioneer in one of the most valuable inventions of the age, identified with the science and the literature of his time, an ornament to the University, and the pride of the Alumni.

Although no longer actively connected with the school as a teacher, he has the happiness of seeing the chairs of Chemistry and Physiology, made vacant by his resignation, ably filled by his two sons.

It is as though an elevated type of fissiparous germination had demonstrated alike the excellence of the stock and the vigor of the parent germ.

The University Medical College enjoys the honor of having inaugurated the era of clinical teaching in this city. The clinic of Dr. Mott has now expanded into those of Prof. Post, of Prof. Gouley, who brought to the Army of the Potomac the operative skill obtained in Bellevue, of Prof. Roosa cultivating his specialty with ardor; and while it awakened a short-sighted and mistaken opposition in the time of its founders, it was the first of those organizations which have since been developed in the colleges of the city. Although clinical instruction was previously given, to a certain extent, in the New York Hospital to those who had paid an extravagant price for a ticket of admission, neither the interest felt by the staff in the subject, nor the accommodations then existing in that hospital, or in the small theatre subsequently opened in Bellevue, sufficed for the necessities of the student.

The method of clinical instruction inaugurated in surgery by Prof. Mott, and in obstetrics by Prof. Bedford, bridged over the period of time which elapsed between the former comparative indifference to bedside teaching as an educational necessity, to the present, when our college clinics are beginning to yield in attraction to the superior advantages of our large hospitals, in which a spirit of honorable emulation has arisen already, productive of surprising results, and prophetic of incalculable benefit for the future.

And now, fellow Alumni, that I have embodied in this retrospect some of the reminiscences of the past, and some of the claims of Alma Mater to an exalted rank among the medical institutions of our country—let me ask how has it fared with you in the battle of life?

Many of our number are at rest. Some have fallen on the field of battle, or have succumbed to the pestilence. Many have revived their college associations and their friendships, after their arduous duties had been discharged to the wounded of both contending armies. Many have shrunk from the responsibilities and heart-aches which weigh upon the physician, and have sought in lighter duties a calmer and less heated life. Some have died in the very bud of promise, to whom the touching words of Newton are as applicable as they were to the young astronomer Cotes. "Ah!" said the unselfish Newton, "if Cotes had lived, we should have learned something." Others may be found in the very van of progress, cherishing the best interests of our profession, and a bright example to us all.

The vicissitudes of life have left their impress on us. Where are the light hearts, and the buoyant spirits which thrilled our pulses when we ascended this platform, and touched the long coveted diploma?

Eheu fugaces, Postume, Postume, labuntur anni! The resistless waves of time bear us onward on the tide of advancing years. We follow those who have gone before. Soon we shall feel that last regret that we had not done more and better in our day and generation, and then—

"Dust to dust, ashes to ashes."

Were we wise when we became physicians? Are those wise who recruit our ranks? I fear that many a heavy sigh proclaims the disappointed hope. The rosy atmosphere of youth has gone, the shadows deepen, the naked stony realities of life encompass our steps. We have our fits of gloom and disappointment. We are condemned to struggle against that immutable law of death, to which we must ourselves succumb.

Our consolation may be found in watching those engaged in other intellectual pursuits, if the gathered experience of our bedside lives has not already taught us the vanity and weariness of human endeavor. "For in much wisdom is much grief; and he that increaseth knowledge increaseth sorrow."

Where in the range of intellectual exertion can men find respite from care, or freedom from disappointment? Where is the field of study in which the physician cannot glean some scattered facts to stimulate his efforts and reward his labor?

Manhood has its ideal as well as youth. When the rude shock of the world has dispelled our first and brightest illusions, when the mirage has gone, the oasis vanished, and the illimitable desert stretches its long waste before us, then all the noblest qualities of our na-

ture which slumbered through the long peaceful years of ease, stir themselves within us and nerve us to the task. Courage and ambition sustain the drooping hope, patience supports the steps, and fancy paints the reward of enduring effort. Far above the trudging feet, the busy brain remembers, plans, devises, until again the arid scene is colored by the glow of manly resolution, striving for the same ideal, though stripped of the chimeras of youth. Disappointments no longer discourage, failures serve as fresh incentives, while true wisdom crowns the gathered treasures of the intellect with the insignia of humility.

In this spirit we recognize in all our trials the purifying discipline of life. To grow wiser is no longer all. To grow better is the thought which slowly blends itself with our purpose, and graces the rugged surface of resolve as the clinging ivy clasps the solid stone in its close embrace.

And so, turning more and more from the material to the spiritual, we find that the greatest love must come from the greatest knowledge, and thus the imperfect intellectual capabilities evolved from our being, though failing in so many efforts, take at last their highest and securest hold on faith in the omniscient Lord and Giver of life.

Survey the broad converging avenues which lead to intellectual distinction, and note how the physician can gather instruction and consolation from the lives of all who toil therein.

Mark the astronomer through the long and weary watches of the night, patiently augmenting the growing record of his observations. Compare him with the immensity of the worlds which he studies. A mere atom, a mathematical point with neither length, breadth, nor thickness, standing on the thin crust above the ever blazing fires which we call the solid earth, he has attuned his mind to the harmony of the spheres, and has extended his knowledge of the boundless limits of the universe by apparatus of wondrous mechanism, so that now machinery does his bidding, and records the results of his vigils with a precision and accuracy to which man himself could never attain. Privileged to read the laws which determine the majestic march of the heavenly bodies, the astronomer foretells the arrival within his sphere of vision of worlds unknown to him until their perturbing influences had heralded their approach. Interpreter of the oldest and proudest of the fair daughters of science, he reads the separate characters of nebulous masses, and recognizes in their immensity a stupendous aggregation of separate planets. The glory of all earthly pageants pales before the grandeur and solemnity of the scenes displayed by the aid of a few well constructed lenses. Copernicus, Galileo, Kepler, Newton, Herschel have passed within the veil. The fable of Prometheus has been realized, and the heavenly light streams through countless telescopes from regions dark to the unaided eye, and illumines the soul.

But consider that among all the countless numbers of gifted men who have labored in this the most ancient domain of science, how very few there are who have advanced its limits. Consider their anxieties, their disappointments, and even their persecutions, and you will see that no achromatic lenses can be contrived to shut out the gloom of discontent—"For man is born to trouble as the sparks fly upward."

The microscope of the physician, planned in obedience to the same laws of light which govern the construction of the telescope, discloses unimagined marvels worthy of comparison with the revelations of the astronomer. He finds in the infinitely small, as the astronomer finds in the infinitely great, wondrous types of beauty, and infinite illustrations of that obedience to law, so grandly illustrated in the movements of the heavenly bodies. The hairs of the head have been numbered, but such labor bears no relation to that which has gradually resolved the tissues of the body into their ultimate elements, and traced them through their predestinal transformations; which has found such startling evidences of design in the ultimate capillary vessels of different organs; which has disclosed those serried ranks of ciliated epithelium, with their sleepless vibrations, lining certain recesses of the body; which has classified the infusoria, recognized them in impalpable grains of microscopic dust, and shown in their migration and development another evidence of that grand subordination to law, set like the seal of the Creator on all his works; which has detected in the excrementitious parts of man and birds those sparkling crystals shedding a flood of light on the treatment of disease, and those shells of transcendent beauty, baffling the engraver's art; which has unravelled the coverings of the ovule, defined the laws of its growth, and disclosed in the segmentation of the vitellus the first of those wondrous changes in the progressive and uniform development of fœtal life.

And, as the astronomer finds that the elaborate investigations of ages only serve as starting-points for new discoveries which astound his intellect, and make him feel with Newton that he has merely gathered pebbles on the sea-shore of knowledge; as he recognizes in the "sweet influences of the Pleiades" the forces which overthrow his heliocentric theories, and direct again his hopeless labors in search of the unattainable; so does the microscopist recognize in the teeming myriads of unseen life, within, beneath, and around us—in the mechanism of their organization, so minute that years of patient study are demanded for a few of its component parts, so perfect that the inventive mind of man hails with gladness in these models unsurpassable illustrations of the adaptation of means to ends—evidences of the inexhaustibility of his researches, and of that power which holds the earth in the hollow of his hand, and has known all things from the beginning.

What creations of man are more enduring, and more distinctive of his preëminence, than the varied types of architecture? From generation to generation, they symbolize the religious aspirations of peoples and the ambitious hopes of kings. Lost languages are graven on their walls, and buried for centuries in oblivion, until, after the lapse of ages, the Rosetta stone is found and the dead past speaks to the living present. For thousands of years they bid defiance to natural laws of decay. Empires crumble, nations become extinct, seas and rivers change their barriers, the name and memory of architect and builder are gone for ever—but still the solid structure stands.

But the physician recognizes in the long bones of the human skeleton that union of strength with lightness which has done so much for architecture, and sees in the mechanism of the pelvis that combination of the principle of the arch and the suspension bridge with which the greatest triumphs of engineering have been achieved. Pursuing his researches through the realms of nature, he finds in the nests and homes of animals a perfection of adaptability and contrivance which challenge our lasting admiration while they humiliate our pride.

How touching are those discoveries of facts illustrative of domestic life which the enduring pyramids transmit more surely than the proud memory of their founders! In a leisure moment the humble laborer toiling with a hundred thousand of his fellows on the slowly rising structure, scratches on the sides of a stone the name of the reigning Pharaoh. The pyramid is finish-

ed. Pharaoh and people sleep with their fathers. The name of the king has lapsed from the memory of tradition, but the careless record of the poor workman transmits through thousands of years that name of his supreme master which the stately pyramid had failed to guard.

From the legended tomb the mummy is at last borne to countries of which the existence was not even surmised in its lifetime. Strange forms and faces watch with mingled curiosity and interest the unwrapping of the successive covers, but when there falls from the shrivelled armpit the flower which has been pressed there through centuries, the unmistakable token of a last affectionate thought rolls back the buried ages, and the electric spark of sympathy flashes from the unseen past into the living heart.

Customs and languages may disappear, the form of men may change with the influence of climate and mode of life—but the same tear falls from the mourning eye today which bedewed the mummy of the Pharaoh—through all recorded time the human heart thrills to the same human emotions.

They slumber in all their vitality through centuries of time, but at the fitting moment their talismanic influence is felt. The buried grain of wheat from the Egyptian tomb ripens at last into the golden harvest of another hemisphere; the symbols of joy and sorrow engraven on stones long hidden in Egyptian and Assyrian sands, touch the same chords of feeling now, and proclaim the brotherhood of man.

How wonderful are the contributions of the literature of the past to the physician of to-day! The dead and buried languages yield to him their hoarded treasures of wisdom. He sees in the experience of ages the expanded experience of a life. With all the stupendous achievements of science he finds in the aphorisms of the fathers of medicine the barriers which limit his progress to-day. "Vita brevis, ars longa, occasio præceps, experimentum periculosum, judicium difficile." Generations of scientific men have left the proud record of their discoveries as starting-points for the enthusiasm and the genius of their followers, but, as the boundaries extend, new and more fruitful fields for observation widen the horizon. "Plus on s'élève, plus l'horizon s'étend." The strivings of science for unattainable knowledge illustrate the startling mathematical law that a thing may be infinitely greater than a thing infinitely great.

Philologists have at last unlocked for us the sacred books of the Hindoos, and the physician finds in the Sanscrit of thousands of years ago, in the record of those laws which govern the development of the offspring of mixed races, the same results which our experience in the South has taught. Let us hope that the prophetic words of the wise old Hindoos may not apply to us. "Every country," they say, "in which the purity of type is defaced by admixture of races is soon destroyed with its inhabitants."

The artist steeps his senses in types of beauty, and harmonizing all their attributes in the rich tints of his poetic fancy, the result is shown in "the statue which enchants the world," or in the mellowed splendor of the canvas before which generations bow in hopeless emulation.

The physician deals with life itself. The wasted form, the pallid haggard face, the sunken suffering eye lie before him on their couch of pain. The feeble cry of infancy, and the stifled anguish of maturer years echo within his heart. See in the results of his labor the wondrous change. The parched lips are wreathed with smiles, the sparkling eye, the rounded outlines, the rich blood which mantles in the cheek and warms the swelling heart, the merry peals of laughter surely demonstrate the advancing power of his art. The writhing limbs, contorted with pain, relax themselves, and bathed in refreshing sleep acknowledge in graceful attitudes the magic power of an anæsthetic. The gibbering soulless face of the insane is lighted up again by the dawn of returning reason, and transformation more wonderful than that of the fabled Memnon, bursts forth in songs of praise.

And thus, amid all the cares of life, the true physician finds his consolation in the contemplation of his ideal, and in his warm intellectual sympathy with all students of nature's laws. No mere routinist, deserving the sarcasm of Voltaire, and pouring drugs of which he knows little into a body of which he knows less; but, humbly recognizing the limitations of all knowledge, he shares this humiliation with all earnest seekers after truth, and points serenely to the past in evidence of the progress of the present.

Progress of Medical Science.

PROCESS FOR PRODUCING HYDROGEN.—M. Heurtebise describes in a late number of *L'Invention* an economical method of obtaining hydrogen gas. He places charcoal in a retort and raises it to a red heat; then passes over it a stream of carbonic acid, thus forming carbonic oxide. Into another red hot retort he passes a current of steam and the gaseous contents of the first retort, and the products in the second retort, resulting from the decomposition of steam, are carbonic acid and hydrogen gases, which are separated, and the carbonic acid is again used in the first retort. The interesting process, described as new in the French journal, has been long used in America, particularly by those experimenters who have aimed at mixing more hydrogen with the large class of hydrocarbons which are very rich in carbon, and therefore liable, from imperfect combustion, to give off fine particles of unconsumed carbon in the form of smoke.

TANSY IN EPISTAXIS.—Dr. C. P. Uhle (*Medical and Surgical Reporter*) has tested quite thoroughly the virtues of the *tanacetum vulgare* as a remedy in epistaxis. An accidental application of a tansy leaf to the part while a student, completely controlled the hæmorrhage in his own person, and has never since failed in his hands. In some instances the simple aroma of the plant proved sufficient.

THE BICHLORIDE OF METHYLENE, the discovery of which is attributed to Dr. Richardson, of London, is claimed to differ from chloroform in the rapidity with which it produces anæsthesia, in the prolonged insensibility which results from its inhalation, and in the facility with which complete anæsthesia may be reëstablished by the reception of a very small quantity of the vapor when the effect begins to diminish. There is said to be no secondary excitement in the action of this agent, no convulsive movements and no vomiting. The patients upon whom experiments were made with the bichloride of methylene glided softly into complete unconsciousness, and after continuing under its influence for periods varying from half to three-quarters of an hour, with very slight variation of pulse or breathing, recovered their consciousness as quietly as they had lost it.

NATURE AND MODE OF PROPAGATION OF PHTHISIS.—Dr. William Budd (*Lancet*) expresses a conviction that phthisis is a true zymotic disease, of specific nature, never originating spontaneously, and perpetuated solely by the law of continuous succession, and that the tuberculous matter itself is or includes the specific morbific

matter of the disease, and constitutes the material by which phthisis is propagated from one person to another.

Experiments with Bromide of Potassium.—Messrs. Eulenburg and Gutmann have stated, before the Academy of Medicine of Paris, that doses of from thirty to sixty grains, either by the stomach or injected under the skin, kill a rabbit in from ten to forty minutes. Smaller doses momentarily disturb the action of the heart, and paralyze the power of moving and feeling, causing a few antecedent shivers. On a post-mortem examination of the animals, no change, but some congestion of internal organs is found. With frogs, a subcutaneous injection of one grain to two causes, after ten or fifteen minutes, loss of movement, reflex action and feeling, with arrest of respiration, weakening and infrequency of cardiac ventricular action, retardation of peripheral circulation, and lastly, complete diastolic arrest of the heart's action. These effects are attributed by Messrs. Eulenburg and Gutmann, not to the bromine, but to the potassium.—*Lancet.*

Subcutaneous Incision in Carbuncle.—"I have had several opportunities of seeing, at the Hôpital St. Louis, in the service of M. Guérin, cases of anthrax, more or less grave, treated by his method of subcutaneous incision. This proceeding counts many partisans among us. It consists in plunging in the centre of the anthrax a straight bistoury, which is immediately insinuated on the flat under the skin beyond the limits of the swollen part; and, as soon as the limit is passed, the cutting edge of the instrument is turned towards the deeper parts, to incise them from the circumference to the centre, till the sensation felt indicates that resistance is overcome. This first incision only indicating one radius of the diseased surface, three others are made which converge towards it to the point at which the bistoury was introduced. When the integuments offer a mortified point, or an orifice, it can be used for introducing the instrument, without its being necessary to divide the skin to however slight an extent. The success of this operation, says Dr. Guérin, seems to solve the question of the seat of anthrax; for, if it be practised at the outset of the malady, it arrests the march of it, and opposes the mortification of the skin. Often the cellular tissue suppurates, and is eliminated under the form of a 'core;' while the skin presents no alteration. The subcutaneous incision of anthrax has the special advantage of relieving the patients from the liability to erysipelas and to purulent infection. Besides, this means is not very painful; for it spares the skin, which is of all the tissues that of which the incision produces the most pain. Finally, it does not give rise to a deformed cicatrix—a consideration which is not to be disdained when the anthrax is seated on the face or any other uncovered part of the body. After the incision, emollient poultices are applied; and in all cases the cure occurs more quickly than by any other treatment." *Paris Cor. British Med. Journal.*

Diagnosis of Polypus Nasi.—Obstruction to the nasal passages, due to a thickened condition of the mucous membrane lining the cavity, is without doubt one of the commonest sources of error in the diagnosis of nasal polypus; for the lower turbinated bone, covered with its thickened mucous membrane, is a prominent object in the nostril of a patient suffering from this disease, and an obstruction to the passage is at the same time a marked complication of its presence. The practitioner is thus too often misled into the idea that a nasal polypus is the cause of all the symptoms. The external appearances, however, of the parts involved in these two conditions are so different that such an error of diagnosis should not be made; for the nasal polypus has usually a transparent, pale, succulent aspect, whilst the mucous membrane covering the turbinated bone is of a dull, congested, and more solid nature. It is also to be observed, on examination, that the mucous membrane covering the turbinated bone is continuous with the same membrane covering the nostril. This latter fact is readily seen, and, in doubtful cases, is sufficient to make the diagnosis clear.—Thomas Bryant, F.R.C.S., *Lancet.*

Does the Liver form Sugar?—The *glycogenic* function of the liver, as it has been termed, which was regarded a few years ago as a well established point in physiology, has been called in question, lately, by means of sundry experiments going to show that it is not produced in that organ until after death, and that its production is due to a kind of fermentation which can only take place in stagnant blood. Such, at least, is the claim made by Prof. Schiff, of Pisa, as stated in a letter from that city, written by a correspondent of the *Richmond Med. Jour.* The Professor found that a ligature drawn tightly for forty minutes around the thigh of a rabbit produced a flow of sugary urine lasting twelve hours, and that pressure with the finger upon the abdominal blood-vessels of a rabbit for five or eight minutes produced the same effect, which lasted upwards of two hours. His theory of diabetes is that the sugar results from a ferment in the blood which has not the power to act in the normal condition of the body, but which is enabled to operate when the circulation in the liver and other parts is interfered with by paralysis of the vaso-motor nerves which supply the blood-vessels. The therapeutic indication derived from this theory is to prevent or annul the evolution of the ferment in the blood of a diabetic patient. This, it is suggested, might be attempted by the sulphites and hyposulphites of Polli and others. Diabetes, according to this view, becomes a *zymotic* disease. Whether we have gained much in the treatment of it, through the indefatigable labors of modern physiologists, is a question. We may, at least, felicitate ourselves that, sooner or later, these labors will be brought to a useful bearing on practice. By such thorough and laborious researches as distinguish the age in which we live, truth must be developed. Though the harvest be long delayed, yet it must come in the course of events. As the matter now stands, we are not aware that the treatment claimed to be "rational" can demonstrate its superiority in practice to that which is purely empirical.—*Pacific Med. and Surg. Jour.*

Danger attending Eye-washes containing Preparations of Lead.—From practical observations made at the Hospital of St. Sauveur at Lille, upon the evil effects of collyria containing acetate of lead, quite frequently employed as an astringent in light cases of ophthalmia, a precipitate of lead was observed upon the cornea, a layer of chloride of lead, which renders it dim, and forms erosions upon it by destroying its epithelium. Vessels are developed upon the cornea, as it were, to resist this morbid process, and the precipitate, after its disappearance, leaves behind it an ulceration of the cornea and pannus, which it is very often very difficult to remove—in fact, a greater evil than that it was first intended to remedy. The sight of the right eye was thus completely lost in a case for whom the following collyrium had been prescribed: Subacet. lead, ʒ ss.; Sydenham's laudanum, gtt. xx.; dist. water, ℥ v. M. This is barely useful in some cases of pannus; and even blennorrhagic inoculation, instituted in Belgium, seems preferable in these cases; in proof of which several cases have been published in this "Revue." It is thus safer to erase it entirely from the list of eye-washes.—*Canada Med Journal.*

Separation of Epiphyses of lower end of Humerus.—Mr. Robert W. Smith, F.R.C.S.I., in an address upon Surgery delivered before the British Medical Association at its late meeting in Ireland, thus remarks upon the diagnosis of this form of separation:

"The symptoms which belong to it, in common with fracture above the condyles, are the following: Shortening, crepitus, the removal of the deformity by extension, and its tendency to recur when the extending force is relaxed; the presence of an osseous tumor in front of the joint; the increase in the antero-posterior diameter of the elbow. It differs from the supracondyloid fracture in the greater transverse breadth and regular convex outline of the anterior tumor; in the existence of two tumors posteriorly; in the loss of the normal relation of the olecranon to the condyles. It resembles dislocation of both bones of the forearm backwards in the following particulars: The transverse diameter of the anterior tumor is the same in each case; so also is the antero-posterior breadth of the elbow; in both the olecranon ascends above the condyles, the limb is shortened, and two osseous prominences can be distinguished posteriorly. It differs, however, from luxation in the existence of crepitus, in the tendency of the deformity to recur, and in the circumstances of the anterior tumor being destitute of trochlea and capitulum, and the two posterior tumors being nearly on the same level."

Ephidrosis Cruenta.—Dr. McCall Anderson, at the meeting of the British Medical Association, related a case of the so-called bloody sweat. The patient was a lady fifteen years of age, who, in connection with defective and irregular menstruation (she commenced menstruating at the age of eight) suffered from attacks of hæmorrhage from the skin from oval or round erythematous patches situated symmetrically on the face, arms, chest, and legs. The outbreaks occurred very suddenly, generally without premonition. The patient would know however at once of an attack by a peculiar sensation, and when the part would be immediately exposed the cuticle appeared to have melted away, and a "complete dew of blood," was detected. With the exception of the menstrual derangement and the cutaneous phenomena, this young lady appeared to be in perfect health. The general tonic course was pursued, with stimulating hip baths at the menstrual epochs, and afterwards with Fowler's solution. She eventually entirely recovered.

Considerations Suggested by the Study of One Hundred Cases of Stone in the Bladder of the Adult Recently Operated on. By Sir Henry Thompson.—The cases were not selected, but were simply those which had occurred in the author's practice during the last three years and a half. Not a single case applying was refused operation; that, in the worst cases, being the only chance of life. They were all adults, the children's cases being omitted. The following facts were noted. Of the 100 cases, 84, or about four-fifths of the total number, were operated on by lithotrity and 16 by lithotomy. The mean age of the 84 lithotrity cases was 62½ years; among them were no less than 21 cases of 70 years and upwards, 2 being upwards of 80 years of age. Among these 84 cases there were only 4 fatal cases. The lithotomy cases, 16 in number, had a mean age of 63½ years. The youngest was 42, the oldest was 80 years; 6 were above 70 years of age, including 1 each of 77, 78, and 80 years; 6 cases were fatal. Of the entire 100 cases of operation upon unselected patients, having a mean age of 62¾ years, and submitted to either lithotrity or lithotomy, there were 90 recoveries and 10 deaths. These cases must be considered as less promising cases than the product of any given district. Four propositions were deduced from the facts stated. 1. Lithotrity is the most successful operation for at least four-fifths of all cases of stone in the adult which come under the surgeon's notice at the present time, a statement which is more definitely expressed in the fact that the rate of mortality for such cases in this series is barely five per cent. 2. Lithotrity can be thus successful only when it is performed on a definite system in accordance with certain practical rules which experience has determined, and which can be laid down. 3. Cases of calculus, in which one of the two operations, lithotrity or lithotomy, ought not to be performed, are excessively rare. 4. By exercising an ordinary degree of vigilance for adult patients suffering from symptoms of urinary disorder, every case of calculus may be discovered in an early stage, may be successfully treated by lithotrity, and, consequently, the operation of cutting for stone may be rendered obsolete, or applicable only for some very exceptional example which has been developed as the result of extreme neglect or ignorance.—*British Medical Journal.*

Acute Rheumatism by Syrupus Calcis.—Dr. C. E. Buckingham (*Boston Medical and Surgical Journal*) speaks highly of the beneficial effects attending the administration of this medicine in acute rheumatism. He has used it in doses as large as forty-five drops every two hours, but generally thirty drops have been sufficient. He cautions against its use in the form of a pill, or dissolved in water, and prefers milk as the vehicle. He has never found alkaline urine to result from its use, no matter how large or frequent the dose. He prefers to have it made of caustic lime. "The best formula," says he, "would be to mix two ounces of lime unslaked and eight ounces of sugar together in the mortar, and pour over the mixture a wine pint of boiling water. Add boiling water enough to make up the pint, and filter. By the use of boiling water, the operation is more rapid and the formation of lumps is avoided."

Splanchnoscopy.—If one holds an egg before a bright light, it is seen to be translucent. If a bright light were introduced into the stomach, we could obtain a tolerably fair view of its anterior and lateral parieties, by a similar property of translucency. Impossible as this demonstration would seem to be, it has been successfully performed by M. Milliot, of Paris. He introduces into the stomach glass tubes of small calibre, containing two platinum wires, connected with the electrodes of a powerful battery—the apparatus of Middedorpf he prefers—and thus kindles an intense light in the cavity. Tumors in the abdominal walls can thus be demonstrated, indurations and ulcerations detected, and, indeed, to what extent diagnosis may not be facilitated, it were premature to say. Certainly the idea is novel and worth considering.

The Influence of Stricture of the Pulmonary Artery on the Formation of Tubercle.—M. Lebert, the eminent Professor of Breslau, in a paper sent to the Academy of Medicine of Paris, comes to the conclusion that the stricture above named, at the origin of the vessel, has a tendency to produce an extensive and progressive tuberculosis, the characters of which may be clinically and pathologically ascertained.

Nævi by Nitric Acid.—Mr. Thomas Smith, F.R.C.S., in some clinical papers on the surgery of childhood, recommends the application of nitric acid to nævi in preference to any other caustic, or to the knife.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, December 16, 1867.

THE PROPOSED CHANGES IN OUR COLLEGE SYSTEM.

A CIRCULAR has recently been addressed to the various Colleges, asking for a concerted action on their part upon the several propositions offered by the late Teachers' Convention in Cincinnati. The committee that represents this association, having a more or less permanent character, are perfectly competent to present the matter officially before the different Medical Schools, and in that light this last appeal for reform should undoubtedly be viewed.

They take for their basis of action the resolutions passed not only by the Convention but by the American Medical Association; and as our readers are already familiar with that document in detail, it is unnecessary here to do more than give an outline of the scheme. In brief, then, the changes proposed may be summed up under four heads: First, a positive standard of preliminary education; secondly, a longer time in which to acquire a knowledge of the various branches of Medical Science and Practice; thirdly, a systematic and successive order of studies for the student; and lastly, a certain amount of direct clinical instruction in a public hospital, as part of the senior course.

We have from time to time taken occasion, in our discussion of various matters connected with Medical Education, to urge the adoption of the suggestions therein contained, severally and collectively, and to endorse *in toto* the action of that body. We have not only been of this opinion, but have been ready to go a step or two farther in upholding measures that, under the present system, would seem almost impracticable. But this is by the way.

The objects of the circular which is before us are not only intended to explain away many of the arguments which have seemingly been brought forward by some of the schools against the resolutions referred to, but also to fix a period to the present system of medical instruction. Its first intention has been, to our way of thinking, well carried out, and we have only to hope that its second object will be also attained in an equally satisfactory manner.

In reference to the question of preliminary education we have fully expressed our views, and the plan which we took occasion to suggest was the examination of the students by some competent persons other than the faculty, in order that no plea that any unfairness or partiality could be brought forward. This at the time we believed was practicable, and we are still of the same opinion. There may be some other means adopted to insure this end, but this matters not, so long as the spirit of the resolution is carried out. The committee have, with some show of policy, merely presented the necessity for the adoption of some feasible means without suggesting anything definite. This is hardly the wisest course that could be pursued, inasmuch as it is advisable to form as a responsible body a distinct platform upon which all points at issue must be directly settled. A failure to distinctly define the manner in which these preliminary examinations should be carried on may still leave the whole question open, a prey to misconceptions and to the temptation of practically ignoring the subject altogether.

On the other proposed changes the committee is more to the point. In regard to the increase in the members of each college faculty good reasons are given. The contemplation is to give four lectures per day to each class throughout the whole college term of six months. We cannot see how this can be objected to by any faculty. The necessary increase of their members will so divide the labor as that each one can perform his duty to himself and to the students. To the supposed decrease in the income of each professor by the adoption of this course the committee have offered a satisfactory and conclusive answer. The increase in the faculty they assert is amply compensated for pecuniarily by the requirement that each student shall pay full fees for three courses of lectures instead of two. With this the teachers can find no fault, and the student will not be liable to demur, especially when no choice is left him in order that he may be sure of his diploma in the end. The increased expense for the whole term will not be felt any more for the third year than for the two previous ones, while in the end the increased outlay on his part brings him a richer premium in the allowance of extra time to benefit by the instruction which he receives.

The section referring to the branches to be taught during each term was simply for the purpose of naming a definite course to be pursued by each college, so that such a uniformity in the general system might be obtained as would allow students of different classes to transfer themselves to different colleges without occasioning confusion.

In order to obviate embarrassment in making the change from the present system of college instruction to the one proposed, the committee prudently suggest "that all students who have so nearly completed their period of study at the time fixed for making the change that an attendance on an additional course would ren-

der them eligible to graduation, should be allowed to complete their course by attending the Senior department under the new arrangement; while all who are in the first half of their period of study should be subject to the new arrangement in full." This proposition is an eminently proper and practical one, and should effectually do away with the principal obstacle to the speedy carrying out of the new plan.

The time set for the inauguration of these changes is during the winter term of 1868–9, and it strikes us that there is ample opportunity offered to all the colleges to discuss the matter by answers to the following questions by the committee:

1st. Do your faculty, together with the governing authority of your College, approve of the several propositions as a whole?

2d. If you do not approve of the plan of revision as a whole, what changes would you suggest?

3d. If you approve of the plan as a whole, or of all its essential features, will your College be ready to adopt it practically, and issue your Annual Announcement for the College term of 1868–9, in accordance therewith; provided all the principal Medical Colleges in this country (or at least those in the cities of Boston, New York, Philadelphia, Baltimore, Richmond, Charleston, New Orleans, Louisville, Cincinnati, St. Louis, Chicago, Buffalo, and Albany) will agree to do the same at the same time?

These answers are to be addressed to the Chairman, Dr. N. S. Davis, of Chicago. We hope that every respectable Medical College in the land will consider it a bounden duty to give the subjects referred to the fullest consideration, and be prepared when the time comes to agree, if not entirely upon the plan as set forth, at least sufficiently so to insure that uniformity of action which shall crowd out every element but honorable competition and an earnest desire to raise the standard of Medical Education.

There is no reason why a response should not be received from every College by the committee before the first of March next, when opportunities would be given to call another Convention of Medical Teachers, and have a report presented to them in due form.

What general practitioner returning from an obstetric call, after having spent with his patient many weary hours, has not felt that it would have been an incalculable relief to him to have shifted the case upon some other one? There is no department in medicine where so much time is spent which is so little recompensed as in obstetrics; and, in view of that fact, the physician has often rightly wished for some substitute who might be competent to care for all his ordinary cases.

The persons to whom we naturally look for a performance of this part of the practitioner's duties are properly educated midwives. It is well known that the plan of confiding obstetric cases, when of simple character, entirely to such females has been for a long time, and still is, in successful operation in Europe; in fact, many of our German and French brethren who are practising in this country are in the habit of entrusting all their cases to them with the most satisfactory results. The midwives referred to are in general exceedingly trustworthy, and being educated to send for the physician whenever any other part than the head of the child presents, they are not likely, unless designedly, through presumption of knowledge, to blunder by incompetent interference.

We are confident that such a system might be inaugurated in this country, and we are equally sure that if it were, the profession generally would give it their hearty support. A good plan would be to form a corporation in connection with some hospital, which should be legally qualified to give the suitable instruction to well recommended applicants, as the necessities of the case require, and also to issue licenses which would be held in the light of diplomas for practice in this particular department and at a particular time; beyond that it is not necessary that we should go. If a well organized corps of obstetric lecturers were established, and regular lectures upon the duties of attendants upon natural labor delivered, it would be calculated to turn the tide of female medical education into a more natural, useful, legitimate, and profitable channel.

We are pleased to learn that the friends of Dr. W. Marsden of Quebec, the well known sanitarian, contemplate presenting him with a handsome testimonial in order to show their appreciation of his energy and ability in connection with the establishment and improvement of quarantine regulations. Such a mark of favor, which could not be more worthily bestowed, points with significance to the probability of the appointment of the distinguished gentleman as chief of the Sanitary Bureau of the Federal Kingdom.

In obedience to an implied promise to further discuss the matter of recipes duplicated without proper authority, we now deem it expedient to recur to the subject.

We have already expressed our views upon the moral aspects of the question—and here we use the adjective in its broadest sense—and, at the same time, without any attempt to forestall the judgment of the profession, we more than intimated that the prescription belonged to the physician *in fee simple*. Since then, through the kindness of Dr. O'Sullivan, who has been prominently identified with the movement, we are enabled to lay before our readers what is technically known as a "legal opinion."

First.—The prescription is a direction from the physician to some druggist to put up for and prepare for a patient's use, a certain medicine. When the druggist performs this act and files away the prescription, he has no right to again put up or prepare medicine from that prescription, unless he does so by the order of the

physician who originally gave it. He has no more right to do so than a merchant would have to deliver on a written order for one barrel of flour sundry barrels, after the one called for was delivered.

A more important feature is, however, involved in the matter of physicians' prescriptions being duplicated by a druggist, without the physician's authority or instruction, which is that the medicine so duplicated may be entirely unsuited to the patient's changed condition of health, which the druggist has no opportunity of knowing. No one is capable of judging in such matter but the attending physician. The druggist that duplicates a physician's prescriptions, without the physician's orders, commits a crime against society, inasmuch as he permits medicine to leave his store which may cause the death of the person to whom it is administered.

Second.—Medical societies have a right to prescribe and establish a rule for the government of druggists in such matters, which no doubt druggists would carefully observe. This would save the medical profession from many charges of mal-practice, and many persons from the injuries resulting from the continued use of a medicine not advised or prescribed by a physician.

Reviews and Notices of Books.

CLINICAL LECTURES ON THE PRINCIPLES AND PRACTICE OF MEDICINE. By John Hughes Bennett, M.D., F.R.S.E., Professor of the Institutes of Medicine, and Senior Professor of Clinical Medicine in the University of Edinburgh, etc., etc. Fifth American from the Fourth London Edition. With five hundred and thirty-seven illustrations on wood. New York: William Wood & Co., 61 Walker street. pp. 1022.

WE remember what a treat we enjoyed as a student when we took up Watson's Practice of Physic, and read it through in course. It was an oasis in the desert of slipshod and dry medical literature, which invigorated the young traveller along the pathway of medical knowledge for many a waste beyond. Here is another book which must give to the student the same relief that did the classic work of Sir Thomas Watson. It has been adjudged superfluous to speak for books that pass through such numerous editions as the one before us—they speak for themselves. Yet, when an author so eminent as John Hughes Bennett takes the pains which have been here taken to keep his works abreast with the most advanced state of medical knowledge, it demands more than a passing recognition. The sections have nearly all been retouched, and the peculiar, and, we believe, very generally accepted views of the author have received new explanation and verification. Dr. Bennett's mode of conducting a clinical course must certainly commend itself, as it has already to the students of the former editions, to those who study the present one. The only wonder is that in the United States, where we have such advantages for clinical instruction, we do not make better use of them. Too many of our colleges are pleased when the physician or surgeon in charge makes a great impression on the wondering student, but fails to give him any instruction. This is the fault of our system, and not of our teachers.

Students in our hospitals should hear and see more for themselves, and be questioned by the clinical lecturers. Any one who has seen the method of clinical instruction as it obtains in the wards of Oppolzer and Skoda, in Vienna, must draw painful comparisons when he visits those of our eminent teachers; but, let it be remembered, the comparison is not between the teachers, but the methods, for our instructors are certainly as able and interesting as those abroad. Private instruction in New York is doing the work that ought to be done in the clinical wards before the whole class or sections of it.

In the part of the work on the examination of the patient, the physician will find an account of the use of the laryngoscope, illustrated by wood engravings, which make every special book on this subject merely a luxury; and so with the microscope. Velpeau's note in the second section, showing by statistics that morbid growths may be removed and allow the patient immunity for years, is valuable as giving a fixed standing-point where so much is mere quicksands of conjecture. Dr. Bennett concludes from the facts he presents, "that the possibility of permanently eradicating cancer may now be considered to have been incontestably demonstrated."

The theory of change of type receives new attacks from our author, and his views are sustained with interest and vigor. He regards it as "altogether fallacious, and entirely opposed to all the data which histology, physiology, and pathology have accumulated in modern times." The "inquiry into our present means of treatment," on page 320, subdivided into the three heads of Dietetics, Hygienica, and Materia Medica, will be found a very scientific and sensible discussion of the means at our hands in combating disease. The second part of the subject is, perhaps, the one in which even our wisest practitioners must often fail. In the case of office consultations especially, the inquiries are not minute enough as to the mode of life—eating, exercise, sleeping, hours of the patients, etc.

We are tempted to linger over our notice of this book, already so well known, from the mere gratification of pointing out some of its excellences. The student or medical man who has not already profited by its complete and interesting presentation of *clinical* medicine, which is in fact the whole of medicine, will find in the letter-press, as well as the numerous and beautiful woodcuts of this work, a guide with almost the fulness of a cyclopædia, without any of its dryness. Even the "Ethics of Medicine" receive the consideration of our author, and an eloquent page is devoted to "the sense of duty and moral obligation" with which a medical man should be imbued.

We have thus spoken of this book, as if it were a new and unknown one, but this is somewhat necessary when we consider the new recruits which our ranks are constantly receiving, and who need advice in the mass of medical literature presented to their bewildered choice.

The American publishers have brought out the work in an excellent manner.

INHALATION: ITS THERAPEUTICS AND PRACTICE. By J. SOLIS COHEN, M.D. 8vo, pp. 305. Philadelphia: Lindsay & Blakiston, 1867.

WHEN a certain divine was asked why it was that he allowed the choir to sing such lively airs in his church, he replied, "*The devil has had the best tunes long enough;* it is time now that the Lord should have his share."

The last decade has witnessed a vigorous and organized determination on the part of scientific men to wrest the employment of a number of useful therapeutical agents from the hands of ignorant and unscrupulous outsiders, and to consecrate them to the service of truth and humanity. The feeling is every year growing stronger, both in Europe and America, that the quacks have had some of our best remedies long enough, and that it is time that science should have her share. It is to the influence of this spirit among the more advanced men in the profession that we owe the valuable contributions that have recently been made to the very

important special departments, of gynecology, the venereal, ophthalmology, aural surgery, the movement cure, electro-therapeutics, and the system of treatment by inhalations.

This work of Dr. Cohen is one of the many protests that have recently been issued against the sinful neglect of therapeutics, that has been so fashionable among our leaders in science. It is, at least, an attempt to find out "a more excellent way" of treating a variety of affections that have hitherto been regarded as obstinate or incurable. Although the work is mainly a collection of observations gathered from a variety of sources, and although the conclusions arrived at, on many points, are very indefinite or unsatisfactory; yet it will be, on the whole, of great service to every student of therapeutics, and must be regarded as the most valuable contribution that has yet been made on the subject of inhalations.

To the observations of other practitioners, in Europe and America, Dr. Cohen has added the results of his own experience; and although his bias in favor of inhalation is decidedly stronger than our own, he has yet presented the subject with scientific fairness, and we shall await with interest the result of his future studies.

The plan of the work is as follows: Part I. Inhalation of nebulized fluids. Part II. Inhalation of medicated airs, gases, and vapors. Part III. Inhalation of powders.

The following facts seem to be established:

1. That nebulized fluids, and also powders, penetrate into the respiratory passages.

2. That for quite a wide range of diseases of the respiratory passages, inhalations are often of very appreciable service as adjuvants.

3. That considerable further experience is necessary to settle many doubtful questions, both in regard to the utility and the method of employment of inhalations.

The record of the experiments made with the inhalation of oxygen is of especial interest and very suggestive. The plan and arrangement of the work are excellent and clear, but in his style of composition the author sometimes lays himself open to criticism. Science should always be presented in short sentences. Involved, tortuous, and unbalanced paragraphs, especially in the summing up of conclusions, are very apt to mislead and dishearten. A few short, decisive sentences will not only be more readily understood, but will also be much longer remembered.

In the pursuit of his special department of Laryngology, the author will have abundant opportunity to make further experiments with inhalations, that will, we doubt not, be of great value to science.

Our limits will not permit us to describe the work in greater detail, and we can only recommend it to all who are desirous of experimenting with this very pleasing branch of therapeutics.

INJURIES OF EYE, ORBIT AND EYELIDS; THEIR IMMEDIATE AND REMOTE EFFECTS. By GEO. LAWSON, F.R.C.S., Eng. Assistant Surgeon to the Royal London Ophthalmic Hospital; late Assist. Surgeon of Rifle Brigade. London: Longmans, Green & Co. 1867; 12mo, pp. 430.

WE have received from the author the original edition of this highly practical work. In a preceding number we took occasion to commend it to the attention of every practical surgeon, and now seize the present favorable opportunity afforded us, while acknowledging the receipt of the London edition, to reiterate this good opinion, and at the same time to refer to the very superior style in which it is issued by the publishers. Our American reprints are nominally cheaper, but our English cousins are still our masters in the typographical art.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, Nov. 20, 1867,

DR. HENRY D. BULKLEY, VICE-PRESIDENT, in the Chair.

RESULTS OF DR. QUIMBY'S METHOD OF TREATING CLUB-FEET.

DR. QUIMBY, of Jersey City, by courtesy of the Academy, exhibited two patients who had been subjected to his mode of treatment for club-feet by adhesive straps (see MEDICAL RECORD, Vol. I. p. 554). One of the little girls employed her feet without any embarrassment; while in the case of the youngest, still an infant in arms, he contrasted the difference between an original cast and the present condition.

TREATMENT OF DISLOCATED CLAVICLE BY SAME METHOD.

The doctor also exhibited a patient in whom a dislocated clavicle at the acromial end was confined in position by a similar use of the adhesive strap, along with compresses at the salient points of the injured shoulder. The adhesive band passing around the shoulder and elbow, admirably answered the purpose of immobility.

DR. FINNELL adverted to the rarity of this dislocation.

DR. QUIMBY claimed that there could be no question as to his diagnosis, which had been verified by Prof. Post. He stated that the patient had sustained the injury as a result of direct violence applied to the shoulder by a fall from a horse. He was prepared to cite another instance of the same injury which had been received by a person engaged in house-moving. The lesion, he thought, was quite easy of detection by reason of the prominence of the points in question.

DR. GARRISH thought that in the case of club-feet, the application of the adhesive strap might be made *immediately after birth*, and related a case in his own experience, where he successfully carried out this plan. For his own part, he could see but few contra-indications to a general adoption of this as a rule; he had also failed to find any very serious objections to the use of Scarpa's shoe.

DR. QUIMBY said that in the case of weak, scrofulous children, in whom the tendo-achillis had been divided at the usual time, and that, too, by experts, the condition known as "weak ankle" was not infrequent.

DEATH OF PROF. HOOKER.

DR. CHAMBERLAIN read a communication from Dr. John G. Adams, announcing the death of Prof. Worthington Hooker, of Yale College, which occurred from typhoid fever, November 6. The usual condolatory resolutions were then passed.

After an informal debate upon a question of medical ethics, which was ruled out of order, the Academy adjourned.

STATED MEETING, DECEMBER 4, 1867.

DR. ALFRED C. POST, PRESIDENT, in the Chair.

THE QUESTION OF BLOOD-LETTING.

DR. POST, by previous arrangement, opened the discussion upon the subject of blood-letting. After alluding to the antiquity of the practice—it having been in vogue among the Egyptians, Assyrians, and other nations, and resorted to by Polydorus soon after the siege

of Troy, not to mention the endorsement of Hippocrates, or its rank as a remedial agent all through the period of Roman civilization—he remarked substantially as follows: Notwithstanding its loss of reputation, partly caused by an abuse of its power, he contended that venesection was a remedy of real value, and in many cases was indispensable—in other words, that it shortened the progress of disease, and increased the prospect of cure.

Its effect upon the circulation was well marked, as evidenced by a decrease in the frequency of the pulse, a lowering of the animal heat, and a diminution in the volume of the artery. To use a conventional phrase, "the pulse rises," it becomes fuller, and the patient very often experiences relief at once. The effect of opening a vein is beautifully illustrated in peritoneal inflammation, for here the pulse being "*small*," an increase in force is more readily detected.

The doctor thought that in acute inflammations and in active determinations of blood to important organs, the blood-letting plan of treatment was of substantial value. It relieved local pain. Among the other effects he alluded to free and copious perspiration, a tendency to syncope, nausea, emesis, and sometimes convulsions.

It might be judiciously employed from infancy to old age, although in the first mentioned stage of life its application, perhaps for no very cogent reasons, was limited to the use of leeches. In advanced age great caution is required, but for the benefit of the over-timid he cited two recorded cases—one that of a man aged eighty-seven bled twice in one day, and another aged eighty, bled nine times for pneumonia—these in proof that even under this adverse condition it was not so destructive to life after all. The case of the late Dr. Cheesman [who died in 1862, aged seventy-five years, Ed.], as related by Dr. Alonzo Clark, was also to be remembered in this connection, since he was evidently benefited by a copious bleeding.

Dr. Post, to fortify his position, then related the following cases, given in brief as below:

Case 1.—A gentleman, æt. 40, low in stature, plethoric, with a short neck and much devoted to commercial pursuits, during the extreme heat of a summer several years ago, was seized with coma, convulsions, etc. When seen professionally, the bloodvessels of his face were found turgid with blood, and his whole condition naturally suggested venesection, which was accordingly performed. A copious bleeding restored him to consciousness, and probably to society. He afterward had like attacks, the second one during the extreme cold of the next winter, which were subdued by the same means; but finally, after these repeated onsets apparently excited by extreme ranges of temperature, he died of apoplexy.

Case 2.—A young clergyman, in the course of a platform speech, reeled and fell. Having a flushed face, full pulse, and great confusion of mind, he was bled, with marked and complete relief.

Case 3.—A woman, æt. 40, small and slender, with a pulse of inconsiderable force but not remarkably compressible, being seized with a severe cephalalgia, referrible to the frontal region, sent for him. He administered the usual remedies, revulsives, cold affusion to head, cathartics, but without benefit. The patient then suggested bleeding, which Dr. P. had not before entertained, owing to its apparent contra-indication. Her solicitation was backed by the assurance that previous bleedings in similar attacks had always afforded relief. The loss of something over a pint of blood from the arm verified her statement. He was subsequently called, say three or four times at long intervals, and each time the patient was bled with the same result. After several years also he was summoned at night to her bedside—she was in a state of stupor, had a wild look, was unable to speak, but significantly pointed to her elbow. A full bleeding brought relief, and since then she has enjoyed comparative immunity from attack.

Case 4.—A little over a score of years ago, before uræmia was a recognized disease, he (Dr. P.) was called to a lady with full habit in the eighth month of pregnancy; she had a vertigo, which merged into partial loss of consciousness; her pupils were dilated, her face flushed and somewhat œdematous; in fact, he was now pretty well satisfied that she was "*uræmic.*" But be that as it may, a bandage applied to her arm, as preliminary to venesection, caused fainting; still he felt, that notwithstanding the syncope, this was the course to be adopted. Dr. Delafield as consulting physician strongly endorsed this view, and as a result of their deliberation the patient lost one quart of blood with removal of symptoms. The patient was in due time delivered of a boy, who is now a husband and father. Here he thought that the lancet might be credited with *two* lives.

Case 5.—A lady, æt. 31 or 32, removing from the country to the city, in the last month of her pregnancy, with no attendant engaged, sent for him. He found her with anasarca, countenance pale, waxy, and œdematous. With a view of unloading the cellular tissue, he gave a hydragogue cathartic, and finding no symptoms of labor, he left. On the next day, however, she was taken in travail; there being great rigidity of the os uteri but little progress was made; besides, she complained of a persistent pain between her eyebrows. Fearing uræmic convulsions, he bled her freely, when the headache ceased, the us uteri relaxed, and the patient, after a natural labor, made a complete recovery.

The doctor also held to the view that even in chronic affections the lancet was not always to be avoided.

He instanced the case of a young widow once under treatment by him for a severe pain in the right hypochondriac region, along with an intense jaundice. Regarding the case as either one of impacted calculus or as a spasm of the biliary duct, he resorted to full anæsthesia, with temporary benefit, which he prolonged by anodynes. The attacks were quite frequent. Finally she passed into the hands of the late Dr. Richard K. Hoffman, by whom she was bled with marked benefit.

Another case adduced was that of a patient in the New York Hospital who was suffering from a somewhat intractable *iritis*. This was several years ago. This patient, when first seen by him, had lost no blood during the early stage, his gums had been touched, he complained of pain and impaired vision, his pupil was irregular, etc., etc. Having a firm resisting pulse, he was bled by the house surgeon under his (Dr. P.'s) direction. The inflammation then began to pass away very rapidly.

Dr. P., in concluding his remarks, cited the case of strangulated hernia at the New York Hospital upon which he had called the usual consultation of his colleagues preliminary to an operation. In the interim, however, he directed the hard, tense, and tender tumor to be covered with leeches, when spontaneous reduction took place. He also referred to the benefits of the local abstraction of blood by leeches in the case of acute pneumonia in the very young subject, and in pneumonia generally when no depressing influence was at work. Bleeding during the first twelve or twenty-four hours of puerperal peritonitis, and by this he meant the sporadic variety occurring in private not public practice, he also regarded as beneficial, notwithstanding the small pulse and the first difficulty to get a flow of blood.

Dr. Anderson referred to the change in professional

opinion regarding this matter, which would be more obvious by contrasting a period twenty-five or twenty-six years ago with the present time. He remembered having read the work of Dr. Armstrong on fevers, which very strongly impressed him. Venesection in this treatise was much praised, and it had occurred to him that following up the bleeding with anodynes would be eminently philosophical. While of this way of thinking a gentleman, "a full and hearty liver," sent for him. The patient had great respiratory oppression, but no pneumonia—bleeding at once relieved him. In the case of Dr. Cheesman it would be proper to note, that notwithstanding the very happy result, much more blood was lost than was originally intended, since the slipping off of the bandage allowed the bed to become quite well ensanguined before the discovery was made.

Dr. Woodhull reminded the Academy of the case of Dr. Francis, deceased, who was bled to about the amount of eighteen ounces for the relief of laryngitis.

Dr. Foster also reverted to the time when bleeding was usual. He was quite certain that he had cut short the progress of an acute pneumonia, some three, four, or five days, by the opening of a vein and a reliance upon diluent drinks. In those cases where bleeding was omitted—for, even in those days, all did not bleed—he inclined to the view that the percentage of recovery was less. He had himself lost two pounds of blood for a pleurisy, and with immediate relief. The doctor then described a fever of congestive character which prevailed in 1837, in a country village, previous to his taking up his residence in this city. In these cases, venesection evidently was of benefit.

Dr. Garrish thought that discrimination in the use of the lancet was necessary—that in certain cases it was absolutely essential, while in others its effect could not but be pernicious. He regarded depletion in acute inflammation of the eye as a remedy of great value.

Dr. Peter Van Buren remembered having himself been bled by a distinguished physician of Albany, now deceased, twice in a short interval, for a threatened inflammatory disturbance. A low fever, of a typhoid character, proved that the operation was uncalled for.

At the beginning of his professional career, it was thought impossible to initiate the treatment of pleuritis without a resort to blood-letting. In such cases, the respiration did certainly become quite free. He also alluded to the benefit accruing from venesection in two cases of puerperal convulsions, before the days of chloroform.

Dr. Worster gave in his testimony regarding the application of leeches between the shoulder-blades—especially in the case of young children suffering from pneumonia of a grave type. He was in every sense well pleased with the result.

Dr. Sayre was cognizant of a case where leeches were applied between the shoulders, and the child in consequence died. This had made a strong impression on him. Oiled silk jackets, poultices, etc., he regarded as much safer and more serviceable.

Cases requiring prompt bleeding he regarded as quite rare. He did not wish to be understood as saying they never occurred, since he had himself carried a lancet in his vest pocket for fifteen years and had used it three times.

A broad distinction existed between local depletion and the abstraction of blood from the general circulation. The effects were quite different. For his own part, he could not see why girdling the arm and the leg on the opposite side for ten or fifteen minutes at a time, and then alternate with the opposite limbs, should not, by the withdrawal of a certain amount of blood from the general circulation, answer the object of the practitioner much better, and with less risk. For, in these instances, the blood is not lost, but temporarily withdrawn—its mission to nourish and repair has only been suspended.

The change in our modes of treatment, he remarked, was due, not to popular prejudice, but to the increased information of medical men. The starvation and the lancet plan had gone out of date—all were beginning to believe more in good food and good air.

Dr. Woodhull would hesitate to bleed except in sudden apoplexy. Some twenty-five years ago, it was quite difficult to get women to do without being bled once a year. He had, however, converted some over to his views, and they had invariably admitted that their health had improved after the discontinuance of the practice.

As regarded puerperal eclampsia, he guarded against it by careful watching of his patients previous to their accouchement. A few fortnightly visits would often save much vexation and anxiety.

Dr. W. was of opinion that in discussing these and kindred subjects we did not keep sufficiently well in view, the difference between patients in the country and those in the city.

Dr. Richards, after a few remarks by Dr. Van Buren concerning a change of type in disease, asked whether it might not be a change of opinion, and for the purpose of giving the junior members of the Academy an opportunity of expressing their views, he moved that the discussion be resumed at the first opportunity.

Dr. Griscom, in seconding the motion, remarked that the very important element of physical and chemical changes as affecting the character and condition of the blood, had been entirely lost sight of during the discussion of the evening.

The motion prevailed and the Academy adjourned.

NEW YORK MEDICO-LEGAL SOCIETY.

Stated Meeting, Oct. 22, 1867.

Dr. T. C. Finnell, President, in the Chair.

DUTIES OF A MEDICAL WITNESS IN CASES OF MAL-PRACTICE.

Dr. James J. O'Dea, in continuation of the discussion upon the above subject, offered the following remarks:

He recommended in the first place, that when a physician is asked to give testimony in a case involving the reputation of a fellow practitioner, he should consider the following questions: *Does my education* (taking the word in its broadest sense) *qualify me to pass judgment in such a case? Am I sufficiently unbiassed to be able to give a fair, unprejudiced testimony?* Conceding his satisfaction as to his qualifications in this respect, he answers these two questions in the affirmative; he might then proceed to give the disputed subject his serious and careful attention, pursuing the following order: He should examine accurately the facts upon which his opinion is to be based, cautiously abstaining from a conclusion until every relevant point is investigated, questioned, and found reliable. Now, this is the test of "a competent witness." In the performance of this duty, if not before, the value of the preliminary questions already mentioned, will become evident. It will then appear that not every man has the requisite patience judicial quality of mind, or logical training in weighing the value of evidence, in separating what is essential from what is non-essential, what is reliable from what is unreliable.

As a digression, he might refer to the fact that very

often there are at least two opposing medical witnesses in trials having a medico-legal bearing, and sometimes each so identifies himself with the cause of the side on which he is engaged, that, in the witness-stand, the medical evidence is contradictory to an astonishing degree. Why is this? Some explanation is not difficult. Each has considered his own side of the question, and that only. Neither gets possession of the facts common to both sides. Neither starts from a common ground. They have either never consulted together, or the consultation has been held in that formal and ridiculous manner out of which nothing comes, and which, even in the ceremonious old days of three-cornered hats and powdered wigs, was made the theme of many a jest by caricaturists and satirists.

But to return, let us suppose a case in reference to the more immediate subject in hand. Take the simplest. A surgeon is sued for shortening of a leg, the result of fracture of the thigh bone. What is the duty of the medical expert in approaching such a question? First, he would repeat, he should decide *on his own competency*. After that, he may examine the history of the injury, its nature, the period at which the surgeon was called in, the mode of treatment adopted, the care and conduct of the surgeon in his dealing with the case, and equally, the conduct of the patient during treatment. He will take his measurements of the limb, comparing the shortening with what he has witnessed in his own experience, and learned from that of others. He will do all this that he may be able to give an intelligent answer to questions such as the following: Was the limb properly treated? Was the conduct of the surgeon in relation to his patient such as to lead to the conviction that he used all necessary and usual precautions to insure as sound a limb as the circumstances permitted? He did not say these are the questions that will be asked upon the stand, he did but think they contained about the pith of the whole matter.

Now let us place our medical expert in the witness-stand and ask ourselves what are his duties there. They are many, including those to science, to himself, and to the physician whose reputation is on trial. In respect to science, he stands in the relation of an advised and independent exponent of its most modern, most advanced ideas. One of the most important of his duties is to be independent and unbiassed. No matter on what side he may be engaged, he should strive, above all else, *never to be a partisan*. He should be calm and self-possessed. Few men of any profession enter a witness-stand without a degree of nervousness varying according to individual temperament. Some can easily subdue this, others partly, and again others not at all. These last should avoid such a position. A good deal that is wise has already been said during the progress of this discussion on the best way to answer the questions of counsel; so, leaving this part of the subject, he will conclude by offering a few words on the duties to the accused practitioner. He should have the full benefit of every doubt. The medical expert should shield him and defend him by every means in his power consistent with truth and a beneficent justice. It is a good rule to adopt—and so far as he had considered the matter, it admits of no exception—never to pronounce an opinion adverse to the treatment of a case unless it displays some fault which can only be attributed to gross and culpable neglect. That one physician should condemn another for "an error of judgment," is so pedantic, so ultra-dogmatic, as to seem almost incredible if frequent experience did not teach otherwise.

After some further discussion on the part of the Society, and a liberal interchange of individual opinion, the Society adjourned.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Nov. 13, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

REMOVAL OF STONE BY DILATATION.

DR. HAMILTON presented the bladder, urethra, with the left ureter and kidney attached, etc., taken from a woman, of whose case he presented the following history:

Harriet James, a mulatto, aged thirty-nine years, born in Virginia, was admitted to Charity Hospital, Blackwell's Island, August 21, 1867, suffering with a stone in the bladder. She was a married woman, and had borne seven children. She had been blind from early infancy. During the last four years she had passed several calculi, some of which were of the size of an almond. At the time of her admission she was laboring under chronic cystitis, and suffered great pain, accompanied with an almost constant desire to urinate. The stone was felt with the sound, pressing snugly against the neck of the bladder. It could also be felt distinctly with the fingers through the walls of the vagina.

Sept. 5, 1867, in presence of a number of medical gentlemen and students, I removed the stone by the method of dilatation. Rapid dilatation was made rather than slow dilation, as has usually been practised and recommended, because the irritability of the bladder and urethra was such that they would not have tolerated the presence of an instrument or of any foreign substance for any length of time.

The patient having been placed under the influence of ether, I introduced a Weiss' female urethral dilator, and in about five minutes opened the blades nearly one inch. I then closed and withdrew the dilator, and introduced successively several sizes of gold and hollow india-rubber bougies. The last had a diameter of just one inch. Withdrawing this, I now introduced the forefinger of my right hand easily, and felt the stone. Withdrawing my finger, I carried in a medium-sized lithotomy forceps, and seized the stone; but it was so brittle that it crumbled under the pressure of the instrument, and I brought out only a portion. I removed a few other fragments with the forceps, and the remainder I washed out with warm water, thrown in with a large syringe. With my finger I could now feel the whole interior of the bladder, and I found that no particles were left.

During the operation a few drachms of blood escaped from the lacerated mucous membrane of the urethra. I could also feel the urethra contract sensibly, but not suddenly or spasmodically, upon my finger. The patient was then returned to bed.

During several weeks preceding the operation she had been kept constantly under the influence of opiates, I was informed, to appease her suffering. These it was found necessary to continue, as the pain in the bladder had not much subsided after the removal of the stone. It was remarked, however, that she retained her urine after the operation as well as she had done before; that is, she was able to hold it an hour or more, and then the desire to urinate became so great that she was compelled to rise and evacuate the bladder. In rising no water escaped until she sat upon the vessel, nor did any urine escape involuntarily in bed, until a few days before death. Injections of morphine and of nitrate of silver were employed to allay the irritability of the bladder, but to no purpose.

On the 20th of September a diarrhœa commenced, which passed soon into dysentery, and this continued until she died. Her death took place October 2, 1867, about one month after the operation was made.

Autopsy.—The ureters and the pelves of the kidneys were greatly dilated, and were filled with pus and urine. The walls of the bladder were greatly thickened, and the inner surface was lined with masses of lymph, arranged in laminæ, with portions hanging in shreds. The urethra remained dilated sufficiently to admit readily the forefinger, but it was not as dilatable as at the time of the operation.

Dr. Hamilton, in connection with the case, remarked that he had operated for lithotomy five times successfully, but that this was the only one in which dilatation had been employed. He was of course unable to draw from it any conclusions as to the advisability of the latter method. He was not sure but that she held her water in some measure because of the swelling, but he was confident that the circular fibres were not paralyzed; the fact, however, that it was still dilatable after death did not rule out the possibility of her having incontinence afterward, in case she had lived. The fact that the chronic cystitis was not relieved by the operation was a recommendation for an incision into the viscus. He reminded the members that Dr. Emmet had recently advocated the creation of a vesico-vaginal fistula, in cases of chronic cystitis, the idea being to relieve the bladder by an incision into its walls. The subsequent closure of the fistula was comparatively a small matter.

In answer to a question from Dr. Van Buren, he stated that there was no particular change after the operation, save a slight amelioration of the bladder symptoms, and that as far as any evidences of pyelitis were concerned, there was nothing found.

Dr. Van Buren remarked that the failure of the operation to relieve the inflammation of the bladder suggested to his mind the possibility of the existence of pyelitis, and purulent urine coming down from the kidneys into the bladder, thus keeping up an irritation independent of the stone.

Dr. Sands remarked that a few years ago he removed a stone from a pregnant woman. She had symptoms of stone for several months only, and at the time he was consulted she was suffering from symptoms of very severe cystitis. The tenesmus of the bladder was almost constant, and the discharge of purulent urine, loaded with phosphates, was very profuse. The question came up as to the expediency of performing the operation at once, when it was decided in the affirmative, and the stone was removed in accordance with the suggestion of Dr. Emmet. The incision was made through the vagina, and the calculus extracted with very little trouble. The stone was a little over an inch in its longest diameter. He was satisfied that, at the time of the operation, the coats of the bladder were somewhat altered. The vesico-vaginal fistula was immediately afterward closed by six silver sutures, which were removed on the eighth day. The cystitis was arrested at once, and all vesical tenesmus ceased. She was afterward confined, in due time, and everything went on well.

Dr. Jacobi asked Dr. Hamilton if the membrane lining the bladder, in his case, was of recent origin.

Dr. Hamilton believed that it was both recent and old.

Dr. Jacobi remarked that, if it could be settled that it was of recent date, it might be assumed that the deposit was the result of a diphtheritic exudation, which might have had a significant relation to the dysentery from which the patient suffered.

Trichiniasis.—Two deaths from Trichiniasis have been reported in St. Louis.

Correspondence.

MEDICAL MATTERS IN PARIS.

(from our own correspondent.)

To the Editor of the Medical Record.

Sir—To-day celebrates the closure of the Exposition; to-morrow will witness the reopening of the Ecole de Médecine, and the beginning of the long medical year.

In Paris, the ceremonies of the year are reserved for its close as in Italy, while in England, as in Spain and Portugal, whatever solemnities are deemed fitting to dignify the old critical days of the scholastic season are observed at the moment of its recommencement. *L'Union Médicale*, of Paris, in reviewing the celebrations held at the different schools, greatly commends the simplicity of the English, who quietly assemble at the numerous "head-centres" of instruction, listen to a regulation address, and immediately set to work at their studies; whereas, in Madrid and Lisbon the affair is made a state occasion, honored by the presence of the king and highest public functionaries. It is pomp *versus* utility, says Dr. Simplice, and the contrast is manifest even in the themes chosen by the professors for the address. That of Mr. Graily Hewitt, for example, at the University College in London, was entitled, "The Therapeutic Utility of Alimentation," while the discourse of Professor Alonzo at Madrid was devoted to an elaborate exposition of "The Benefits of Instruction."

In Italy, the illustrious Professor Tommasi celebrated the close of the year of official instruction by a retrospective review of the most important clinical facts that have presented themselves to his observation since its commencement. M. Tommasi energetically insists on the sufficiency of clinical study to meet its own legitimate ends, and protests against the prevailing tendency to accept the ideas of Chomel and degrade it into a simple stepping-stone for pathological anatomy. "Clinical study alone has established the causal relations between articular rheumatism and endocarditis, between alcoholism and arthritis on one side, and endo-arteritis on the other, between different species of constitutional infection and an increase in the volume of the spleen, between syphilis and certain special neoplasias of the connective tissue, between scarlatina and croupal inflammation of the pharynx and kidneys."

You remember that Continental physicians (not including, however, the French) are agreed to denominate all inflammations attended with fibrinous exudation croupal.

EPILEPSY DEPENDING UPON PREMATURE OSSIFICATION OF THE CRANIAL SUTURES.

Among other interesting facts quoted from his clinic, Tommasi signalizes a case of epilepsy in a child, dependant upon premature ossification of the cranial sutures, especially the spino-occipital. This cause of epilepsy has been specially signalized by Virchow. In Tommasi's case, the disease was greatly ameliorated by the use of nitrate of silver, but it is difficult to imagine why.

CONCERNING PTISANS.

The use of ptisans is so widely spread in France, where cold-water drinking is considered at once an imbecility and a crime, that their selection becomes a matter of considerable importance. M. Miquel (de Tours) has just published some suggestions on the drinks most suitable in typhoid fever that might be not altogether useless at home. He proscribes all amylaceous

and sugared mucilaginous drinks, especially those containing vegetable acids, and all fermentable preparations, on the ground that they increase the secretion of bile, and the confluence of the intestinal eruption. Therefore, instead of lemonade, currant jelly, gum and barley water, M. Maquel recommends infusions of linden and orange leaves, chamomile and mignonette; also water flavored with a few drops of coffee, tea, brandy, or rum. In preparing rice water, mixed with decoctions of poppy heads, the physician of Tours directs that the rice be not added to the decoction ready made, but only allowed to remain in contact with it long enough for the water to extract the astringent principle of its rind.

DYSPEPSIA AND ITS TREATMENT.

M. Malherbe, of Nantes, publishes some reflections on a subject calculated to interest the inmost heart of every American—on the treatment, namely, of dyspepsia. Considering that, in our favored land, all the blessings of liberty are impotent to save us from the grasp of this foul fiend, and that nearly every one of us has either had dyspepsia, or actually suffers from it, or is destined to suffer in the future; no suggestions on the subject can afford to be lost. M. Malherbe strongly recommends the use of pure hydrochloric acid in all cases of the atonic form of the disease. He considers this substance to act as a stimulating tonic, which facilitates stomachal digestion by assisting to dissolve albuminous substances; by regulating the secretion of gastric juice; by remedying constipation in virtue of an exciting action on the intestine; finally, by a tonic action on the general economy. In various cachexias, even advanced tuberculosis, this medicine is found to render good service. I have myself had an opportunity of testing the truth of this observation, especially at Lariboissière, in the wards of M. Hérard. He is enabled, by means of this acid, to greatly relieve the various dyspeptic symptoms (among which frequent vomiting is not the least painful) which torment the last days of his numerous consumptive patients.

It is recommended to associate wine of quinquina, calumba, or rhubarb, and some preparation of opium with the hydrochloric acid. The following is the formula employed at the Hotel Dieu of Nantes:

Wine of Quinquina . . .	100	grms.
Syrup Thebaic	30	"
Pure Hydrochlor. Acid .	1	"

Mix.

The dose is from two to six teaspoonfuls a day. To relieve the gastralgic pain to which many dyspeptics are martyrs, M. Miquel suggests the administration of a concentrated opiate, combined with a bitter, which serves to correct its injurious effects. The following is his formula:

Syrup of Bitter Orange Peel,	}	āā q. s.
" Morphine		
" Ether		

Mix.

Where the pain comes on principally *before* eating, it is advisable to administer a narcotic or etherized draught about a quarter of an hour before meals. It is M. Hérard's practice to give his patients ten drops of Sydenham laudanum immediately before, and one grm. of pepsine immediately after eating. This treatment entirely relieved the pain, and stopped the vomiting in the case of a woman, who subsequently died from the effects of a diarrhœa maintained by deep tuberculous ulcerations of the intestines, and with whom the mucous membrane of the stomach presented the signs of such an intense arborescent injection, mingled with yellow and slate-colored spots, as really merited the title of gastritis.

ARSENIC IN CEREBRAL CONGESTIONS.

Therapeutics does not constitute at present the most fashionable subject of meditation in the medical world, so much the more, therefore, do I glean studiously all indications of experiment in this direction. M. Lisle has just read a note before the Academy on the advantages of arsenic in the treatment of intercurrent cerebral congestion among the insane. M. Lisle considers hallucinations to be, not a symptom, but a complication of insanity, and always dependent upon congestion, consequently always to be treated by arsenious acid. He claims to have cured 131 patients out of 193 by the use of this medicament, and to have markedly ameliorated the condition of twenty-nine others. If the facts cited by M. Lisle are trustworthy (and there is no reason to suppose they are not) they are in striking opposition with his theory. According to the analogy of its action in all other cases, arsenious acid should be considered as an eminent tonic of nutrition, regulating the life of the capillaries, perhaps, in several ways, but by no means tending to disgorge them of unseemly congestion. At the hospital Beaujon, M. Montard Martin told me that he employed arsenious acid with considerable success against cholera in the last epidemic, and there seemed reason to suppose that the capillary circulation of the surface was restored or stimulated by this potent drug in a manner to relieve the deadly visceral congestion. Moreover, as the editor of the *Montpellier Médicale* remarks, it is far from proved that hallucinations are connected with congestion of the brain, a condition not indicated merely by some redness of the face and brilliancy of the eyes. According to the ideas of Luys in his recent brilliant researches into the minute anatomy of the cerebro-spinal system, hallucinations occur when the thalami optici, instead of simply receiving impressions from without and irradiating them to the periphery, set up an independent action, and originate impressions in the recesses of their own structure. This might occur whether they were excited by congestion or their normal functions perturbed by anæmia.

For those who have not read M. Luys' book, it may be necessary to explain that many of his views on the structure of the brain are quite original. The particular theory to which I have just referred rests on another, purely anatomic, namely, that all sensitive fibres proceeding from the posterior and lateral columns of the spinal cord, are destined to terminate in the thalami optici, which constitutes the first receptacle and halting place for impressions received from the world without. Here the crude impressions are elaborated and ultimately radiated to the vesicular matter of the convolutions along the converging white fibres that apparently proceed from the surface to the base of the brain. These are not, as generally affirmed, the mere continuation of the fibres from the cord, but new ones, deriving their origin from the thalami optici themselves.

THE CHARACTERS OF CEREBRAL SOFTENING.

In this connection it is natural to mention the essay in the *Archives de Médecine*, written by Proust, on softening of the brain. The dominant idea resulting from the researches of this distinguished young physician, is the separation of softening (*ramollissement*) both from encephalitis and hæmorrhage. Encephalitis determines a neoplasia, or is equivalent to it, precisely as inflammation generally involves the idea of exudation.

Hæmorrhage usually results from the rupture of a

capillary aneurism. But *ramollissement* is a necrobiosis, essentially the same as gangrene of the limbs, and its phenomena only differ because the tissues involved are withdrawn from the action of the air. M. Proust, however, reserves the name necrobiosis for a molecular destruction of tissue, and to its destruction *en masse* assigns the term necrosis.

The death of the cerebral substance depends upon obstruction of the capillary circulation, however caused, whether by a thrombus, an embolus, stricture of the cerebral arteries, fatty degeneration of the capillaries, thrombus and phlebitis of the sinus, etc. In these cases, there may be produced either a condition of anæmia or of hyperæmia. If an obstacle to the circulation be situated in the sinus, there is always hyperæmia; obstacle in the capillaries occasions rather anæmia. The first produces the red, the second the white softening. Hyperæmia of the parts surrounding the focus of softening is easily explained by the collateral fluxion in branches of the vessel whose tension has been increased by the obstacle to the circulation. Hyperæmia of the centre of the infarctus is more difficult to account for, and M. Proust only suggests with some hesitation, that it may be due to some action on the part of the vaso-motor nerves, or the result of a functional alteration of the capillaries.

The white coloration is rarely observed, but occurs occasionally in cases of general cachexia, as in the case of cancerous patients.

The red coloration may be uniform, and is then more marked at the periphery; or spotted, and then results from little hæmorrhages arising from the rupture of a great number of capillaries.

Diminution of the consistence of the part is appreciable from the second day. The tissue has a trembling jelly-form appearance. Then the part becomes tumefied, it is softer, the furrows separating, the convolutions disappear, and by the third or fourth day it has become reduced to a diffluent paste.

The first phenomenon detected by the microscope is the appearance of fatty granulations in filtering the tissue. These have been observed at the end of twenty-two hours by Charcot, and thirty-six hours by Prevost and Cotard. Then granular bodies succeed to these fatty granulations and accompany them. According to Bouchard these granular bodies consist of agglomerations of fatty granulations.

Transformations speedily take place, corresponding to what has been described under the name of chronic softening, *plaques jaunes*, cellular infiltration. The coloring matter of the blood transudes through the walls of the capillaries; that already extravasated becomes converted into yellow granular amorphous masses, or else into reddish oblique rhomboidal crystals, the hæmatoidine of Virchow.

Later, a neoplastic effort sets up, and a tendency to cicatrization appears; the pia mater contracts adhesions with the bottom of the excavation that has been formed by resorption of disorganized tissue, and across this excavation are extended laminæ of connective tissue. The tissue surrounding the softened part becomes slightly indurated in virtue of a proliferation of nuclei and cells. This last is analogous to the formation of an eliminating membrane around a patch of gangrene in a limb.

Prévost and Cotard, under the direction of Vulpian, have made a number of experiments on the production of foci of *ramollissement* by injection into the arteries of powder of lycopodium or tobacco. They succeeded in simultaneously provoking infarctus in the brain the spleen, and the kidneys, were able to observe the apparition of fatty granulations and granular bodies, and determine the formation of *plaques jaunes*.

Although the opinions have been refuted which attached softening to inflammation, on account of a mistaken idea that the yellow degeneration consisted of pus, Proust admits that certain analogies exist between the two affections, especially in the formation of the zone of proliferation. Further, that it is impossible to say that hæmorrhage and softening exercise no mutual influence on each other; on the contrary, the first tends to destroy the tissue directly, and to cut off its nutrition, or, on the other hand, the second, by withdrawing from the capillary walls their normal support, predisposes them to yield to the pressure of the blood.

The influence of atheroma upon the production of hæmorrhage is of course unquestionable. I had an opportunity of observing a remarkable illustration in an autopsy recently performed at La Charité. The aorta was atheromatous from its base to a point below the cross; the carotids were sprinkled with atheromatous patches, but arrived at the brain, the internal carotid showed complete degeneration. The same was true of the branches of the basilar artery. In this brain, sections in any direction revealed a punctuated injection caused by rupture of the capillaries, and in the middle lobe of each side, adjoining the thalami optici, existed a small focus of hæmorrhage.

Truly yours,

P. C. M.

PARIS, Nov. 8, 1867.

THE NECESSITY OF EXECUTIVE SESSIONS FOR THE DISCUSSION OF ETHICAL POINTS.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR—As I have always noticed that whenever a point involving personal notoriety is likely to be discussed before the "Academy," the would-be martyr takes the precaution to come duly supplied with reporters representing the secular press, would it not be well to enforce the rule of exclusion by at once going into Executive Session? We have already had two rather singular coincidences of the presence of reporters from a paper or two of known animosity to the Academy, when it was desirable that an appeal to the public should not be lost for the want of a medium of communication or a sensational rhodomontade. How should these representatives of the press be present then, and never before or since? Simply, because when one desires to play the Spartan, with his back to the rock, he is determined that his pluck shall somehow or other be appreciated.

Yours truly,

G.

NEW YORK, December 2, 1867.

New Instruments.

THE UTERINE APPLICATOR.

By F. B. LAWSON, M.D.,

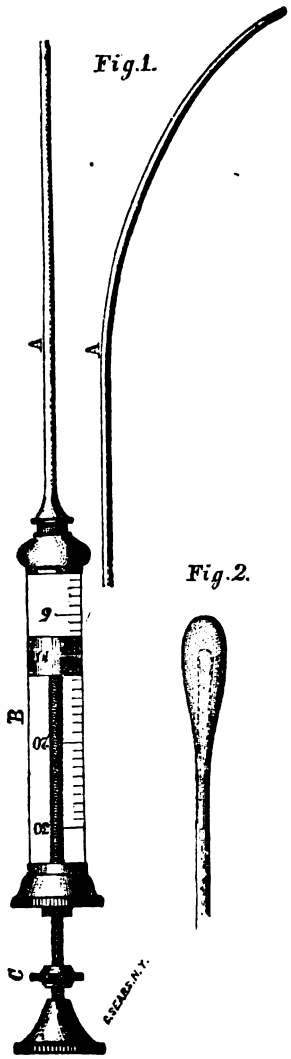
OF NEW YORK.

THE object of this paper is to furnish the medical profession with a description of an instrument, devised by myself, for applying caustic and astringent solutions to concealed mucous surfaces.

I will not question here the propriety or impropriety of this mode of treatment in a certain class of diseases affecting these surfaces, for I am satisfied that this interesting point is already decided; it is the manner of applying them that should engage our attention.

By the usual methods, we all, no doubt, have experienced many difficulties, exposed the patient to many dangers, and often failed in obtaining good results, simply because the surfaces were unevenly touched—too severely cauterized, or not cauterized at all. To obviate these difficulties, and to enable me to apply these preparations to the proper surfaces, I was induced to adopt this new method, and the results, so far as I have progressed, have been remarkably favorable. It gives me perfect command of the caustic, which can be used of any strength; enables me to apply solutions evenly and thoroughly to any surface, as the laryngeal, pharyngeal, and the eustachian tube, to the mucous membrane of the male and female urethra; and even to that of the uterus, which, by the usual methods, is frequently inaccessible, unless the parts are previously dilated.

Fig. 1.



This instrument, which I have denominated a *caustic applicator*, has a nozzle, Fig. 1, A, which is a conical, flexible silver or platinum tube, the size at its bulbous extremity of a No. 2 bougie, at its base of a No. 3, is 7½ inches in length, and is attached to a glass syringe, B. The piston of this syringe works by means of a screw through the nut C, which is attached or not to the cap as the operator may choose, but in other respects it is like the improved subcutaneous syringe, except that the metal below the plunger is of pure silver.

Fig. 2.

The steps necessary to prepare the instrument for use are these:

1. The syringe is to be completely filled with whatever solution is required, and the liquid forced to the end of the tube.

2. A piece of cotton, more or less, according to circumstances, is to be carefully and securely wound round the end of the nozzle, so as to form a bulb (see Fig. 2), which must be thoroughly wet in warm water immediately before being used.

3. The nozzle is to be bent to suit the part on which the operation is to be performed.

To use the instrument, however, after being thus prepared, some little dexterity is necessary, which is soon acquired by practice. The cotton bulb is now applied to the part to be cauterized, a quantity of fluid sufficient to saturate it is to be injected, when it can be used as a swab, and should be moved from within outwards. The piston at the time of injecting the cotton should work through the nut (Fig. 1, C) attached to the cap, and by observing this precaution, the operator, with a little experience, and with the assistance of the gauge, can use whatever quantity of fluid he desires.

This instrument possesses numerous advantages, *the most important of which are these:*

1. It gives the operator perfect command of *whatever preparation he wishes to apply.*

2. It permits of these applications being made to surfaces that are for the most part not readily accessible by the ordinary means.

3. The nozzle being flexible, it is appropriate for all concealed mucous surfaces, and therefore it does the work of many instruments.

4. It applies clean caustic on a clean swab, and cauterizes the precise spot affected thoroughly and evenly, and removes all coagulable materials.

I have used this instrument in the pharynx, for which it is peculiarly appropriate: in the uterus, where I employ it frequently, and for which organ it was originally intended; in the male urethra, in cases of gonorrhœa and gleet, and in all with ease, safety, and decided benefit.

I trust that the profession will find this instrument as useful and valuable, or more so, than is here claimed. In some future issue I may present details of a few cases of uterine disease treated by this applicator.

87 West Thirty-first street.

Medical Items and News.

The Transactions of the American Medical Association, Vol. XVIII., may be obtained of Dr. H. D. Bulkley, 42 East Twenty-second street, by those subscribers who have not yet been supplied. Non-subscribers are also entitled to be furnished at the usual rate of $5.00. We trust that every practitioner of medicine will feel it his duty to sustain the enterprise, and thus relieve the embarrassments of the Publishing Committee.

The Late Professor Robert Watts, M.D.—At a meeting of the Trustees of the College of Physicians and Surgeons in the city of New York, held 18th of November, the registrar having communicated the decease of Robert Watts, M.D., late Professor of Anatomy in the College, on the 8th day of September last, in the city of Paris, the following resolutions were unanimously passed:

Resolved, That by the decease of Professor Watts the College has sustained a loss of one of its most accomplished and successful teachers, whose untiring zeal and devotedness to its interests have largely contributed to its steadily advancing prosperity. For nearly thirty years Dr. Watts had occupied the chair of Anatomy, and taught this most important branch of medical science with acknowledged ability and success, and to the great advantage of the numerous classes of students who have attended upon his instructions.

Resolved, That this Board not only desire to commemorate the loss sustained by the College, but also to express their deep sense of the excellence of Dr. Watts' character, and the heartfelt sorrow they experience in this bereavement.

Resolved, That a copy of these resolutions, duly authenticated by the signatures of the president and registrar, be communicated to the family of the deceased, with the assurance of the sympathy of this Board in the affliction they have sustained.

Resolved, furthermore, that these resolutions be published in the medical journals of the city.

Gurdon Buck, *Registrar.*
Edward Delafield, *President.*

Death from Chloroform.—A death from chloroform is reported in Chicago. The cause is referred to simple asphyxia from the toxic effects of the article, although portions of cracker, of which the patient had partaken shortly before the administration of the anæsthetic, were found in one of the bronchial tubes. The chloroform was pure, and but an ounce was administered. Every means to restore the patient was resorted to without avail.

A Doctor's Bill in the Reign of William III.—In the diary of Sir Thomas Rokeby, justice in the Court of Common Pleas in the reign of William III., just published, occurs the worthy valetudinarian's doctor's bill for only two months, October and November, 1697:—"Purging pills, 2s.; leeches, 6d.; aperitive ingredients, 1s. 6d.; hysticricke water, 2s.; a purging bolus, 1s. 6d.; purging pills, 1s.; Gascan powder, 4s.; vermifuge pills, a box, 3s. 4d.; a purging bolus, 1s. 6d; purging pills, 1s.; cephalick drops, 2s. 6d.; an hysterick julep, 3s. 6d.; hysterick pills, 85, 6s. 8d.; a vomitive potion, 2s. 6d.; a stomattick cordial, 2s.; a cordial potion, 1s. 8d.; vomitive salts, 3 doses, 1s. 6d.; the hysterick julep, 3s. 6d.; Mithridate, 1s.; the vomitive potion, 2s. 6d.; vomitive salts, 1s. 6d.; the hysterick pills, 6s. 8d.; the hysterick julep, 3s. 6d; sal-armoniac, 6d.—2l. 17s. 10d." Spite of this drenching, to which he had to subject himself, he lived to the age of 67.—*British Medical Journal.*

Scotch Munificence.—Subscriptions, varying in amount from 25*l.* to the large sum of 5,000*l.* continue to be paid in for the new buildings on Gilmore Hill, for the University of Glasgow and Hospital, and the total already amounts to the enormous sum of 101,600*l.* 19s. 2d.—*British Medical Journal.*

Dr. D. S. Young has been appointed to the Chair of Surgery in the Cincinnati Medical College.

Dr. E. S. Connor accepts the Chair of Medical Chemistry in the Medical College of Ohio, vice Dr. Roberts Bartholow, resigned.

Dr. Henry P. Sartwell, eminent in scientific circles, died at Penn Yan, N. Y., Nov. 16th ult.

Colonel Warren Webster, Surgeon United States Army, has been relieved from the Army Medical Board, in New York city, and assigned to duty as the Medical Director of the Military District of Texas. Colonel Webster had charge of David's Island Hospital during the war, and earned a high reputation for the order, discipline, and general good management of the important post.

M. Nelaton has resigned his chair as Professor of Clinical Surgery. The reason assigned is, that, in addition to his previously immense practice, the recent death of Jobert de Lamballe and Velpeau has put upon him a large amount of work. We have heard M. Nélaton's professional income, from private practice, his positions as surgeon to the Emperor and professor agrégé, estimated at $126,000 per annum. It is said that the anatomist, Sappéy, will succeed him in the clinical chair.—*Medical Gazette.*

The Scarcity of Dissecting Material in London is the cause of much complaint on the part of medical teachers and students. It is supposed to be due to the suppression of the remuneration which was formerly bestowed upon undertakers for the increased trouble of delivering over the bodies to the proper authorities.

The Second Volume of the Sanitary Commission's publications, edited by Prof. A. Flint, is in press. It treats upon medical topics connected with the late civil war.

Surgeon H. F. McSherry, U. S. N., died at sea, October 1st ult., on board the U. S. Steamer *Wyoming*, and was buried at Singapore October 3. He entered the service June 23, 1860, and was promoted to surgeon September 22, 1863. In the early part of 1864, he was on duty at the Naval Hospital, Memphis, Tenn., but was detached and ordered to the *Dacotah*, afterward serving in the North Atlantic Squadron. He was ordered to the *Wyoming* March 18, 1865, and at the time of his death was a passenger, condemned by a medical survey.

The Prize Essay on Physical Longevity—by American Popular Life Insurance Company. This company offered some time since a prize of $500 for the best essay upon this subject. Two communications of the number presented were so meritorious, and it was so hard to decide the question of superiority, that a prize was given to each. The successful authors were Dr. J. H. Griscom, of New York, and Dr. J. V. C. Smith, of Boston.

A Grandmother at Twenty-eight.—An old practitioner who is giving the reminiscences of his medical experience in the *Gazette Médicale de Lyon*, enumerates among them the case of a young girl in his vicinity, who became the mother of a healthy child at the age of fourteen. The child was a girl, and in her turn became a mother at fourteen years of age. The young grandmother, he says, is still hard at work in her village, and is very proud of her title to a unique fame as a grandmamma at twenty-eight.

Sir William Lawrence.—The council of the College of Surgeons have resolved to purchase a bust of their late colleague, Sir William Lawrence, to be added to their collection of Surgical celebrities which ornaments the hall and staircase of the college.

Trichiniasis in Berlin.—Trichiniasis has appeared in Berlin; seventy cases have been already reported, of which two have proved fatal.

The Weight of Trichinæ.—Professor M. Weissner, of Vienna, has computed, that it must take thirty-five millions of trichinæ to equal the weight of one drachm.

A Painful Accident.—Dr. Weber, Professor of Surgery at Heidelberg, and two of his assistants, recently died of diphtheria under the following circumstances:

It was necessary to perform tracheotomy in a case of diphtheria; and in the course of the procedure a clot of blood got into the trachea. M. Weber attempted to extract it by suction in the absence of a proper instrument, and, failing to do so, his two assistants also attempted. All three of them died within six days of each other!

Miasmatic Fevers treated by Chloroform internally.—Dr. Geo. F. Brickett of Chicago (*Chicago Medical Journal*) gives some interesting results attendant upon the administration of chloroform internally. He was led to make use of the article on the recommendations of Prof. Merrill, of this city. Six cases of cure by this agent are recorded. The dose was a fluid drachm, and in every instance the patient, instead of having a chill, went quietly to sleep.

Dr. Roberts Bartholow has been appointed Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

M. Claude Bernard has been raised to the rank of Commander of the Legion of Honor.

Dr. Robert Jessop, formerly of Ireland, died at Mount Erie, Ill., October 30, in the 67th year of his age.

Original Communications.

A SPRING AND SELF-RETAINING SPECULUM.

By NATHAN BOZEMAN, M.D.,

NEW YORK.

The vagina, as a membranous canal, may properly be said to represent a truncated cone with the base turned upward and the apex downward, corresponding with its mouth.

The general outline of the organ, as viewed in its natural condition, is such as would result from bringing the two opposing walls of the cone together, the cervix uteri being encircled by it at the centre of its base, and its mouth closed by the falling together of the labia majora.

The line, therefore, formed by the anterior and posterior walls of the organ coming together is transverse, while that formed by the opposing surfaces of the labia is antero-posterior, being at right angles.

Now the most natural indications for the dilatation of this canal with the peculiarities named would appear to be, first, separation of the labia, and, second, the two opposing walls of the collapsed cone, so to speak. This, scarcely need I say, is the view generally taken of the relationship of these parts, and the usual practice is based upon it of bringing within the field of observation the cervix uteri and the two vaginal walls.

This plan of antero-posterior dilatation of the vagina, it matters not what form of speculum is used, I conceive to be a popular error, and it is wholly at variance with the true anatomical relationship of the parts. I shall presently attempt to explain more fully my meaning in our description of *a new form of speculum*, which I have the pleasure of presenting now to the notice of the profession. The principle of construction, as well as principle of action of this new instrument, will be found to differ from all others heretofore in use in several respects, which I shall explain farther on. Suffice it to say, one of the very essential differences is in what might be termed the working point of the instrument, that portion which is applied to the resistance. The blades of our instrument are introduced between the opposing walls of the vagina edgewise, instead of flatwise as formerly; and the dilatation is effected transversely or horizontally, as will be better understood when we come to explain the principle of action. The same instrument applies to the dilatation of the vulva as well as the vaginal canal; thus giving us at one glance a view of the parts from the mons veneris to the cervix uteri in front, and behind, nearly the whole of the posterior wall of the vagina—any and every point within this extensive range being accessible for operative purposes.

The dilatation thus effected is so regulated that the labia and the two extremities of the vagina are put upon the stretch only to the extent desired, which is in strict accordance with the anatomical conformation of the parts, this being of such a nature as to make the instrument *self-sustaining*, one of its peculiarities; another being *elasticity of flexure*. This principle of elasticity has never before been embodied in any form of speculum that I am aware of, and its utility and importance, in my judgment, cannot be too highly estimated. Instead of the hard, inflexible blade formerly used, touching only at one or two points soft and delicate structures, we have now the soft, elastic spring adapting itself to all the points of resistance with a uniformity to be attained in no other way.

The indications for complete dilatation of the vagina and vulva I conceive to be four:

1st. Elevation of the perinæum.

2d. Elevation and support of the upper part of the posterior wall of the vagina.

3d. Transverse dilatation of the labia majora and the mouth of the vagina.

4th. Distension and steadiness of the upper part of the anterior wall of the vagina, the vesico-vaginal septum.

Now these are the indications to be fulfilled, according to my judgment, independent of any and all efforts of the patient to the contrary; and any instrument, whether *self-retaining* or *not*, that does not meet these ends, must be regarded as incomplete. With my instrument I claim the accomplishment of all, *the fulfilment of the third and fourth indications* being an advance beyond all other methods, to say nothing of the *self-retaining* quality of the instrument, which it must be admitted is based upon more correct principles than any plan heretofore presented to the notice of the profession.

As regards the position of the patient I propose a few remarks before entering upon the description of our instrument, as I consider this of no little consequence in certain operations, especially those upon the anterior wall of the vagina.

While our speculum is equally well adapted to all positions, I prefer in the description and application of it to consider the patient resting upon her knees and breast, the body forming a right angle with the thighs, and the thighs a right angle with the legs. This position I now prefer to all others, and with propriety it may be termed the *right-angle position upon the knees.*

In no other position, according to my judgment, whether chloroform be used or not, can the patient be made so easy, comfortable, and secure, and without the aid of assistants. When folded up it is compact, light, and portable, and weighs only eleven pounds. It exceeds twelve inches in height, only on one side, the depth and width being twelve by eighteen inches. I hope before long to be able to publish a description of this *thoracic rest* or *support.*

We have come now to the most difficult part of our task, a description of this speculum.

Fig. 1 (half size) represents a front quarter view of the instrument, expanded as when introduced for use.

The general features of it as shown, are outstretched arms, expanded wings, rolling surfaces, standing and projecting arches, broad, contracted, narrow and rounded points; and the thumb-screw arrangement indicates that the whole is moved by a system of leverage.

The proportions of the instrument are, I think, in harmony, and the construction will be found to be in strict accordance with well-known geometrical principles. It may be said to be composed of two simple, similar bent steel levers, about 8¼ inches in length, rounded and flattened at certain points, having elasticity of flexure, and connected at one extremity by a pivot joint G, around which they revolve horizontally.

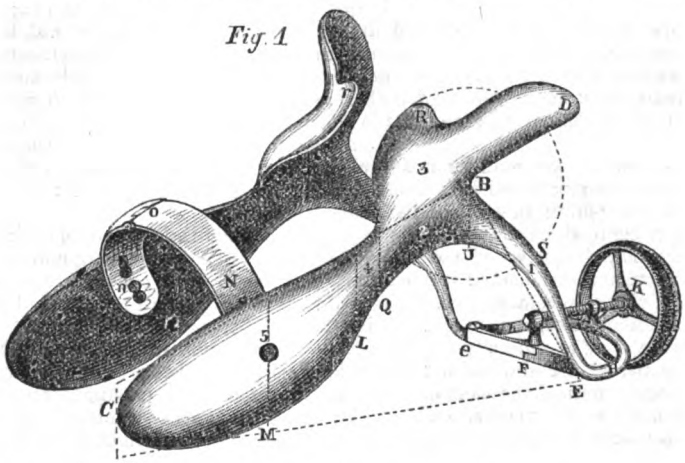
For description, therefore, as is most naturally suggested from its general outline, it may properly be divided into the foot and heel, including thumb-screw and short levers, and into the legs, body, wings, neck, and arms or blades, as indicated by Figs. 1, 2, 3, 4, and 5.

The description of the foot and heel we will defer until we come to study the principle of action.

I shall consider B the centre of the instrument; the plumb line U, dropped from it, the balancing-point.

The legs where they leave the heel E and *e* are r unded, a quarter of an inch in thickness, and for a short distance ascend almost perpendicularly, inclining slightly forward and inward. In the next part of their course they become gradually more and more flattened, extending now almost directly forward, only inclining slightly outward.

The line U indicates their union with the body. Their length is two inches and three-eighths. This part of the instrument applies to the purpose of dilating the vulva or labia majora. The lower part of the legs falls just within the fold formed by the inner part of the thigh and the labia, while the upper portion passes between the latter about the commencement of the nymphæ, and



thus reaches the mouth of the vagina, which corresponds exactly with the plumb line U, the balancing-point.

The body is included between the two lines U and Q, and is somewhat quadrangular in shape, rounding on its outer surface and hollowed out on the inner side to the same extent as the upper part of the leg and the wing standing upon its upper edge, as indicated by the line B Q. This part of the instrument is applied directly to the transverse dilatation of the mouth of the vagina. The wing is of a peculiar shape, and for the sake of description may be divided into the lower and inner portion and the upper and outer portion. The first part presents a rounded surface from right to left, and up toward the projecting angles R *r* looks almost directly forward. These projecting arches are about three-quarters of an inch wide, and at the angles are about three-quarters of an inch above a line drawn across from centre to centre. This part of the wing, with its fellow of the opposite side, gives support to the perinæum, which lies across from one to the other, just as the bridge spans the stream. The upper and outer portion of the wing looks forward and outward, and is intended to support the buttock. The neck between the two plumb lines Q, L, is about half an inch in length and width, and as shown is the most contracted part of the arms. This point comes just within the mouth of the vagina, and consequently prevents painful stretching of the parts here in the expansion of the blades.

The arms or blades form the widest part of the instrument, and are intended to distend and steady the vesico-vaginal septum. They are thin, spoon-shaped, about two inches and three-eighths in length, and at M one and a half inches wide. On the middle of this line is seen the countersunk head of the rivet which passes through here and gives support on the inside to the extremities of the arch N *n*, connecting the blades at this point. This arch is four and a half inches in length, connected in its middle by a hinge joint O, and about three-quarters of an inch in width. It should be made of steel, and so thin between the joint and extremities as to allow of easy bending in the opening and shutting of the arms. There are two holes near each end, with slits in upper edge to encircle the narrow neck of the rivet when in use. This arch may be used or not, as circumstances may require, it being easily slipped off or on. When used it is intended to elevate and support the upper part of the posterior wall of the vagina, it being the fulfilment of our second indication. It is easily elevated or depressed with the finger, and when in position stands about one inch above the edges of the blades, and on a plane slightly above that of the projecting angles of the wings R *r*. Nearly the whole of the instrument, as will be seen by reference to the figure, is included within the legs of the right-angled triangle E B C, only the foot, legs, and wings being outside. The circle D R Q S has its centre at B, the centre of the instrument, with a radius of one inch and a quarter, the length of the line of union between the root of the wing and the body. This circle, as is seen, includes nearly the whole of the wing, the body, and a large part of the leg. This angle and centre of circle, I should observe, are important points to be borne in mind in the manufacture of the instrument. They should be preserved in all cases, it matters not what change may be found necessary as regards proportions.

The instrument, when set upon a table, has its foot flat upon the surface, touching nowhere else excepting at the point near the ends of the blades, as indicated by the base line of the angle E C, which measures four inches and three-quarters. The leg E B measures two inches and three-quarters, and C B four inches and a half.

From centre B to corresponding point of opposite side, the distance is two inches and a quarter. Between tips of wings D *d*, four inches and a quarter. Between commencement of neck Q, three inches. Between blades at M, measuring from outside to outside, four inches. Between points measured in the same way, three inches and a half.

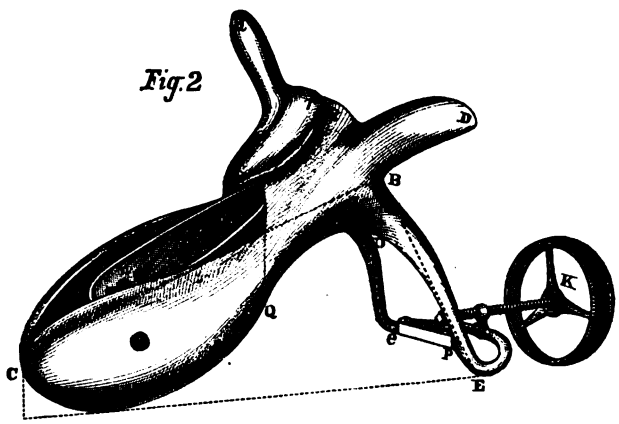
The instrument is to be made of steel, electro-plated, as light as is consistent with the strength required, there being certain points, of course, where this is an important feature; for example, the foot and heel of the instrument.

The *elasticity* of *flexure*, it should be borne in mind,

extends only from the heel to the extremities of the blades, increasing of course in extent as the latter points are approached. The limit of elasticity at the points of the blades should not exceed three-quarters of an inch under any amount of resistance here, and this should be borne in mind in *tempering* the instrument, otherwise the limit might be exceeded, and the usefulness of the instrument thereby endangered.

Fig 2 represents the instrument closed, ready for introduction or withdrawal. It being collapsed, so to

Fig. 2



speak, every point of the opposing sides is brought into closer relationship. The elevated arch standing above the edges of the arms or blades, as seen in the first view, is now folded within them, the upper part of it resting beneath the hugging arches, R r.

In this view of the instrument, there are three divisions made by the two plumb lines U and Q, which are important as directing attention to the uses of the respective portions. The leg, for example, included within the first division, performs the part of separating the *labia majora*. The wings and body of the second division elevate the *perinæum*, and open the *mouth of the vagina*, to the utmost limit transversely. The arms or blades of the third division *unfold* and *steady* the *vesico-vaginal septum*, or upper part of the anterior wall of the vagina, and at the same time give support to the two extremities of the arch which spans the space between them, and receives upon its top the *falling posterior wall of the vagina*.

The thumb-screw K is seen reversed to its fullest extent, and the two short levers quietly folded within the foot of the instrument, the point P being now in close proximity to the pivot G.

We come now to a consideration of the principle of the instrument, and I will state in the outset, as thus applied it is new and original with myself, it never having been applied before, that I am aware of, by any one, to the purposes of a speculum.

The principle itself, however, is an old one, as regards its application to other purposes. It will be familiar to those who may have seen a certain kind of *cotton press* in the Southern States, in which it is employed, though with a more extensive system of leverage than I have here. I got the idea myself from seeing the above application; and the credit I am entitled to is the modification which I have made of it, to suit the purposes of a *self-retaining* speculum, the principle of which we will now attempt to describe. This principle, as here applied, I have no hesitancy in saying, forms one of the most beautiful illustrations of the parallelogram of forces as producing curvilinear motion that could be conceived, and answers, in the most satisfactory manner, the purpose for which it is here intended.

In studying the law of forces, there are several important points always to be borne in mind, whether applied to the rudest lever or pulley, or to the most complex piece of machinery. As these points are or are not understood, depends success or failure.

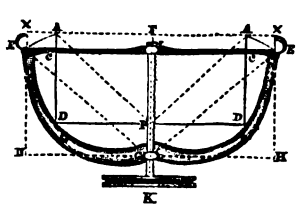
Professor Silliman,* who is authority in matters of this sort, says: "To determine a force with precision, we must consider three things: 1st. The point of application. 2d. The direction. 3d. The intensity or energy with which the force acts."

Inattention to one or more of these rules has, I am satisfied, caused the failure of all previous efforts at getting up a *self-retaining speculum*, to fulfil all the indications previously named. I am free to confess myself that I failed in many of my efforts from this very cause.

My greatest error I now conceive to have been in the point selected for the application of force. Had I the time and space, it might be interesting to show how I labored to extricate myself from this difficulty; but as it is, I shall be content for the present with saying that this instrument, as here exhibited, is not the work of a day, or a week, or a month, but years of patient thought and repeated disappointments.

Let us now turn our attention to the diagram, Fig. 3, which is also a half-size front view of what I have

Fig. 3.



denominated the foot of the instrument, here represented closed and expanded, with both legs cut off at the heel E and E.

The two sides E h G together form, as is seen, almost a semi-circle, with a radius of one and a quarter inches. In the middle, where they unite, is the pivot-joint G, and here is the point of our application of force.

These arms are inflexible, somewhat round, and almost of uniform thickness, not exceeding a quarter of an inch

* Principles of Physics.

anywhere, excepting at the pivot and ends, where they swell out a little, to give additional strength.

Within these arms is situated our plan of leverage for opening and shutting the instrument. This consists of a double-threaded thumb-screw K, about one inch and three-quarters in length, and three-eighths of an inch in thickness, with an open wheel on the outer end, one inch and an eighth in diameter; and of two short, stout levers, one and a quarter inches long. These latter are connected at one extremity by a joint at the heel E and E, two and a half inches from the pivot G. At the other extremity they are connected together by a joint at P. Rising above, three-eighths of an inch, is to be seen the connecting screw of this joint, expanded, and perforated to receive the extremity of the thumb-screw, upon the extremity of which, on the outside, is placed a small tap. In the same manner the thumb-screw passes through the connecting pivot-screw G, which is the nut, the former being free to move both forward and backward.

Let the two lines now on each side, A D and P D, represent the instrument closed, A *f* and P *f* completing the rectangle or square. (An error in the cut; it should be a small *f*.) The diagonal P A will then represent the situation and relationship of the two short levers previously described.

To open or expand these arms now to the full extent, we have, as would appear, two forces, A P and A P, acting at an oblique angle, a very great mechanical disadvantage, as will be readily understood, for "when a force acts upon a body at any other than a right angle, a part of its effect is lost."

The difficulty, however, is overcome and the accomplishment of our purpose rendered easy by resolving each of these oblique forces into two, P *f* and A *f*, one parallel and the other perpendicular to the point to be moved. This is effected by revolving the thumb-screw K until it assumes the position of G F, and the short levers that of E F and E F. The latter together now form a straight line—a relationship that places the whole instrument in a state of equilibrium; the weight of the two sides, being equal, is exactly counterpoised at F. Complete now the parallelogram E H G, and we have the diagonal G E, the resultant of the two components thus applied, which give us the diagonal or oblique relationship of the arms of the instrument which is here so beautifully carried out. In this resolution of forces, therefore, our power is seen to pass through the arc of a circle which is the diagonal of the small parallelogram A *c*, E *x*, the distance A E being three-eighths of an inch. As it is with the seat of power so it is with every other part of the instrument to the extremity of its blades, which, with varying radii, pass through the arc of a circle the length as well as the velocity of which increases with the distance from the pivot G.

For instance, at the centre or balancing-point of the instrument U, Fig. 1, corresponding to the mouth of the vagina and about one inch from the seat of power, we have the arc increased from three-eighths to half an inch, with a total expansion of the arms at this point of two and a half inches. And at the extremity of the blades, a distance of about five inches from the same point, the arc is increased to one and a half inches, giving us a space between the opposing blades of three inches for operative purposes.

At the two points named the limit of expansion of the blades corresponds exactly with the limit of the dilatation of the mouth of the vagina, and its upper extremity, which alone is sufficient to explain the *self-sustaining* and *self-retaining* feature of the instrument.

In the application of our power then to the thumb-screw K, the position of it is most advantageous for producing its maximum effect in collapsing or carrying the two short levers from their oblique relationship to that of right angles with the point acted upon, thus affording an example of increased power with increased resistance. The instrument with the above system of leverage may properly be said to represent a *double bent lever*, the most familiar example of which is the *fire-tongs*. Unlike these, however, it has the power applied on the inside instead of the outside. Alike, though, in the important respect of having the power applied between the fulcrum and the weight or resistance, distinguishing both at once as levers of the third class.

This instrument I shall call *a spring and self-retaining speculum*, as is most naturally suggested from these two distinguishing qualities of it.

I think I may justly claim for this speculum originality in:

1st. The system of leverage employed, possessing as it does regulated and increased power, reduced to the smallest possible compass, and far away from the mouth of the vagina, thus allowing the freest and widest range of manipulation with instruments, compatible with the nature of these parts.

2d. Transverse action of the instrument, with uniformly varying movement of the working-point, extending from the heel to the point of the blades, thus making the lateral walls of the vagina the seat of pressure instead of the anterior and posterior, as formerly.

3d. Complete exposure, at the same time, for operative purposes of the vulva, both walls of the vagina, and the cervix uteri, with the two polished surfaces of the arms of the instrument standing upon the sides, the most favorable position in which they could be placed to secure the greatest amount of reflected light.

4th. Elasticity of the working-point of the instrument.

5th. Being self-retaining in the fullest sense of the word.

6th. Being equally applicable in its use to all positions of the patient.

7th. Allowing all operations to be done without the aid of assistants, or exposure of the person of the patient, further than the parts immediately brought within the field of observation by the expansion of the arms of the instrument.

All of these points, I am safe in saying, admit of the clearest demonstration.

Remarks.—Having now completed the description of our *spring and self-retaining speculum*, it remains for us to offer a few additional remarks upon its application in practice, and the circumstances under which it was first done; for it is reasonable to conclude that the question will be asked, where is the proof of all the advantages which have been portrayed at such length?

The only proof I propose to offer, and I think this conclusive, is the application of the instrument in a single case, the very one to which it was adapted in completing it as here shown. This case being an extreme one, as will appear, has the advantage, I think, of rendering the proof convincing to the practical mind, and lessens the necessity, I conceive, of additional corroborative testimony to satisfy even the most skeptical. The case referred to was one of vesico-vaginal fistule occurring in a very stout, fleshy woman, weighing upwards of two hundred pounds. Early in October last she was admitted into that admirably conducted institution under the direction of the Sisters of the Hoboken St. Mary's Hospital, where my patients are now received.

The fistule was of six or eight months' standing; small, not larger than a pin's head, and occupied what we would ordinarily term a favorable position, being some three inches above the *meatus urinarius*, and near the edge of the septum, upon the left side.

The peculiarity and difficulties of the case were these: Anteversion of the uterus; a convoluted or folded condition of the two opposing walls of the vagina, which was of immense size; and a pleated condition of the edges of the fistule, and the parts immediately surrounding it.

Assisted by Drs. Finnell, Connolly, Lynch, Metcalfe, and several other medical gentlemen of New York, and Dr. Chobert, of Hoboken, I undertook my usual operation, the patient resting upon her knees and elbows. My fourth size of the lever speculum, with a blade four inches long, one and a half inches wide at the heel, and one and three-quarter inches near the point, was employed; and although of such large size, this instrument, with spatulas and depressors, brought to bear from various points by assistants, afforded us only an imperfect view of the very small fistule. The upper part of the posterior wall of the vagina came down in such immense folds over the end of the instrument, met by the same folded and protruded condition of the anterior wall, under violent and almost continuous expulsive efforts, that it became quite impossible to commence the process of paring the edges of the fistule, and to complete it in a regular manner. This stage of the operation, however, was gone through with after the length of time indicated, only to be followed by a still greater difficulty and delay in the next—the introduction of our sutures—only three being called for. The patient, at this stage of the operation, was placed upon her side and chloroformed, which, however, afforded us no relief from the surrounding difficulties.

Suffice it to say, the operation, after three hours, with five or six assistants, was finished, though in the most unsatisfactory manner it had ever been my misfortune to encounter before.

Now, after all our labor and annoyance, I felt that a failure was inevitable, and so expressed myself to the gentlemen present. The removal of our suture apparatus on the eighth day proved too truly the correctness of our misgivings as to the final result. There was a total failure.

With a full understanding now of the difficulties of the case, and seeing the result of the extraordinary efforts which had been made in this operation, I contemplated, I frankly confess, another operation with dread and ill forebodings.

I determined, however, that I would not undertake another until I could devise some plan of securing the patient effectually in the right-angle position upon the knees, which I had had in contemplation for several years; and, if possible, to complete my new speculum, believing that no better case could be found to test its merits. Accordingly, I drew a plan of my *thoracic rest*, alluded to in the former part of this paper, and placed it in the hands of a carpenter, who had it ready for use in five or six days.

As to the speculum, this was not so easily completed, as it involved a radical change in my original plan, arising from a fundamental error in its construction, which I had not discovered until this particular juncture. An explanation of this change would necessarily require a description of the instrument and all the alterations made in it from the beginning, which would far exceed the limits assigned to these remarks in the outset.

On the 20th of November it was so near completed as to enable us to use it.

The patient was now placed in our new position, and thus secured upon the *thoracic rest*. The position was now found to be admirable, and the confinement of the patient perfect.

Chloroform was next administered, and our speculum, as here shown and described, was introduced and expanded to the fullest extent. A reference to the limit pointed out on a former page will give some idea of the enormous size of the vagina. In short, the dilatation of the vagina, regarding all the indications which we have pointed out, was most complete and satisfactory. The insignificant fistule which we had labored so hard to bring into view a few weeks before and failed, now showed itself in its fullest dimensions, steady and immovable, even in the very face of the most violent expulsive efforts of the patient from bearing down and vomiting, before which we stood almost powerless and helpless in the previous operation, with every assistant that could be employed.

I now viewed the parts of operative procedure for the first time with a feeling of certainty as to the result. At my leisure I began the operation, and quietly completed it by my ordinary method, without the aid of an assistant, further than to wash sponges and give chloroform.

In twenty-five minutes our patient was removed from the table and placed in bed, totally unconscious of what had been done. Ten minutes of this time, I should observe, were lost in consequence of a little hæmorrhage which had to be controlled before introducing our sutures.

Thus was achieved, I conceive, the greatest triumph of our professional life.

The above operation was done in the presence of Drs. Thomas C. Finnell, Thomas S. Bahan, Joseph S. Crane, of New York, and Dr. Chobert, of Hoboken, all of whom expressed their entire satisfaction at the result.

To Dr. Finnell I am under many obligations for having so opportunely placed under my charge the above patient, so well adapted to the completion of our instrument. Without such an opportunity our success might have been deferred many months longer. There are also due Dr. Chobert many thanks for his kind attention to the patient during the after treatment.

The result in this case, however satisfactory it may be viewed in the important respects mentioned, merits additional interest, I think, from the fact that the instrument actually employed in the case, and from which these drawings have been made, was completed by my own hands in *gutta percha, sheet lead, and iron wire.* To Messrs. Geo. Tiemann & Co., 67 Chatham street, however, I am under great obligations as regards the foot, leverage, and legs of the instrument, and the many changes and alterations made from time to time in order to reach this stage of completion. They placed at my disposal an experienced and finished workman, who made and put together almost every part of the instrument above named under my own supervision. Without this very great advantage I never could have gone through with the work even to this extent.

As regards the ultimate success of this instrument, from what we have seen thus far in its application I think I can very confidently recommend it to the general practitioner as well as the surgeon, as likely to give satisfaction in all cases where a speculum requires to be used.

That a diminution of the size of the instrument shown here will have to be made to suit the majority of cases I am convinced. This is an extra large size. A medium size, I think, will cover four-fifths of all cases; one smaller size, and a larger one, such as here shown,

covering the other fifth of the cases. In this last class we include such cases as the one above detailed, and all cases with shortening of the vagina resulting from injury of its walls or otherwise. As soon as we can determine properly the alterations necessary to be made in the proportions of this instrument, in order to reach the other two sizes, we will have them made.

The instrument, when completed in steel and electroplated, as designed, will not, I am satisfied, exceed the weight of this our original pattern, which is only eight ounces, being two ounces less than the ordinary lever speculum.

FIFTH AVENUE HOTEL.

CASE OF
ANÆMIA AND DYSMENORRHŒA TREATED BY GENERAL ELECTRIZATION.

BY GEO. M. BEARD, M.D.,

LECTURER ON NERVOUS DISEASES IN THE UNIVERSITY OF NEW YORK,

AND

A. D. ROCKWELL, M.D.,

OF NEW YORK.

IN our recent papers before the Academy of Medicine and the Medical Society of the County of New York, we stated the principle on which we employ general electrization in certain uterine symptoms, and also detailed a number of cases illustrative of the powerful constitutional tonic effects of this method of treatment in amenorrhœa, dysmenorrhœa, menorrhagia, etc., associated with general debility, and not dependent on incurable organic disease.

The great mistake that we are all liable to make in our study of the therapeutical uses of electrization is the confounding of *symptoms* with *diseases*.

In regard to the indications for general electrization, the question to be asked is not whether it be good for this or for that affection, but whether in any case of disease (no matter what its name may be) *we desire a powerful constitutional tonic impression.*

Whether the tonic influence that is received from general electrization succeed in curing or relieving the special symptoms, associated with the general debility, will depend on the constitution of the patient, and on the thoroughness and persistence of the treatment.

In all the painful affections of the female genital system, where electrization is indicated, temporary relief is usually afforded by an application of but a few moments in duration; but permanent cure or dissipation of the symptoms is only achieved by thorough and persistent treatment, studiously varied and adapted to each individual case.

We have sometimes succeeded by general electrization where internal tonics and localized electrization have failed. It is needless to say that we sometimes meet with obstinate and obscure cases of uterine disorder that are as rebellious to general electrization as to all other systems of treatment.

We have thus far met with the best and most uniform success in the treatment of dysmenorrhœa, especially of the neuralgic variety, and in chlorosis.

With amenorrhœa the results are as various as are the causes that produce it.

In mere temporary suppression, the menses are sometimes brought on by one or two applications; but in long-standing amenorrhœa we can hope for abiding results only from a persevering course of treatment continued for several weeks.

According to our experience the tonic effects of general electrization are as permanent as those which are obtained from the use of iron, bark, strychnine, cold bathing, and other tonic influences that we are all accustomed to prescribe.

The following case, which has not before been published, is typical of a number in which we have obtained similar or approximative results.

CASE.—Miss D., aged 21, came to this city from Auburn, to be treated for the variety of dysmenorrhœa termed neuralgic. The treatment by ordinary internal medication was continued some two months, but as the neuralgic pain seemed to be but little relieved, and as her general condition did not improve, she was induced to try the effects of general electrization, before returning to her home. She commenced to menstruate at irregular intervals when about fifteen years of age, and from the first had suffered more or less at each menstrual period. Her general health began to fail some three years before she visited this city for treatment, and when she came under our observation she presented the following symptoms:

She was decidedly anæmic, and the general appearance of lassitude and discouragement which she presented at once betrayed the disturbance of her vital forces. While in many instances of neuralgic dysmenorrhœa the pain seems to be confined solely to those nerves that supply the sexual organs, in this case the disorder extended to the whole system. The constant recurrence and terrible paroxysms of pain from which she suffered rendered life a burden. Even in the intervening time, anticipation of the agony that she again must so soon undergo, caused her to suffer from great depression and melancholy.

In addition to these distressing pains she suffered from profuse menorrhagia, so that what little strength she regained after her sickness, was almost immediately lost on the return of the catamenia. Her bowels had been for a long time obstinately constipated, and unless this state were frequently relieved by aperients she was annoyed by considerable vertigo and headache. She began to despair of ever obtaining relief. She received the first application of general electrization in November, 1866. A very mild and fine current was used, and the application was extended from the neck, down the spine, and over the vital organs.

Although she was submitted to the influence of the current for but five minutes, yet during the application she showed symptoms of faintness, and on the following day she suffered from considerable soreness and nervous prostration. She visited us on three different occasions when her courses appeared, and were as long continued and attended with as great loss of blood as before. There was, however, considerable amelioration of pain. Before the cessation of the flow, we renewed the operations, and continued the treatment uninterruptedly for nearly four weeks. She received an application every other day, and was soon able to bear a current of ordinary intensity. The improvement in her general condition was exceedingly rapid. The capricious appetite became less exacting and the constipated bowels more regular. After a very few applications had been given and the tonic influence of electrization began to manifest itself, she appeared a different person both as to mind and body. When her menses again appeared she suffered but little more pain than is usual, and the general neuralgic distress was quite wanting.

The menorrhagia, which before was such a prominent and debilitating symptom, was now so slight as scarcely to deserve the name. She received subsequently three more applications, when she returned to her home. We were of course anxious to know if this favorable state of things continued, and have been

gratified to learn by direct information that since she discontinued treatment there has been no return of any prominent distressing symptom. She has, moreover, continued to improve in her general condition, until she is now in quite robust health.

914 Broadway.

Original Lectures.

LECTURES ON TUMORS:

BEING PORTION OF THE COURSE ON SURGERY AT THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

Session 1867-8.

By S. D. GROSS, M.D., LL.D.,

PROFESSOR OF SURGERY.

(Reported expressly for the Medical Record.)

I.

This is a subject of great importance, for there is no community in which tumors do not constantly present themselves in some form or other, or in some part of the body or other. It is well therefore that the physician should have a general knowledge at all events of this class of formations. They are liable to occur in all organs and tissues of the body, almost without exception, just precisely as wounds, just precisely as inflammation.

A tumor may be defined to be an enlargement of a part, of a tissue, or of an organ, the result of abnormal deposit. This abnormal deposit may be a superaddition, it may be a new product, or it may be precisely similar to that which is naturally going on under all circumstances of health in the tissues, organs, or structures of the human body. Some of these formations are *benign;* others are *malignant.* The benign tumors may be of new formation, the result of new deposit, or simply the result of inflammatory irritation, or super-nutrition—hyper-nutrition, if you please so to consider it.

The malignant formations are, so far as we are acquainted with them, always the results of deposits of new character; they are additions to the preëxisting tissues.

The number of malignant formations is comparatively small; we have, in the first place, *scirrhus;* secondly, *encephaloid;* thirdly, *melanosis;* fourthly, *colloid;* and lastly, *epithelioma;*—five malignant, heterologous or cancerous formations; those which destroy the part in which they occur, and ultimately, if they are allowed to pursue their course, also the life of the individual; they are therefore called *malignant.*

The *benign,* innocuous, or harmless formations—those which do not assume a malignant character—are much more numerous, twice, if not more than twice, as numerous as the malignant; and a great many of them are simply the result of hypertrophy, or a supernutrition, or the addition of a material which is naturally deposited in the tissues, organs, or structures of the body.

There are few situations in which tumors, benign or malignant, may not arise; if there is any exception at all, it is the aponeuroses, the fibrous structures as they are called, and the tendons, the ligaments, and the blood-vessels; but it is questionable whether even these are not occasionally the seat of both of these formations.

Tumors are liable to occur in the external portions of the body as well as in the internal organs.

The *consistence* of a tumor varies according to its nature, according to the character of the affected organ, according to its age, and other circumstances. Thus, a tumor may, in the first instance, be fluid; by and by it may become more or less solid; ultimately perhaps entirely solid: or, instead of this, the tumor may be fluid from its commencement, and continue in this condition during the remainder of its existence, no matter how protracted this may be: or a tumor may be partly fluid and partly solid, and this may be in different portions of its extent, and another part may be semi-fluid, or semi-solid, depending upon circumstances. In the earlier stages of their existence, tumors, as a general principle, are softer than in their advanced stages, because as the period of their duration continues they acquire a greater degree of solidity.

Tumors vary very much in their *volume;* thus there may be a tumor not larger than a millet seed, or a small pea, or a cherry; and, on the other hand, it may be as large almost as the body upon which it grows. The late Dr. Francis, of New York, reported many years ago a case of fibrous tumor of the uterus which weighed one hundred and four or five pounds. Elephantiasis of the scrotum sometimes acquires an enormous bulk; cases are on record of tumors of this kind weighing upward of one hundred and fifty pounds. I have myself repeatedly drawn off water from ovarian cysts amounting to upward of ten gallons, in one instance twelve gallons; and still larger quantities have been drawn off from a cyst of this kind. These remarks will give you an idea of the size a tumor may acquire.

The *form* of a tumor varies in different cases; in some it is perfectly round, in others conical, in others pyriform, in others exceedingly irregular, and in many instances we find that it is nodulated, or marked by elevations and depressions.

The shape of the tumor is very much influenced by the structure in which it occurs, much more than by its nature; if there is much pressure exerted on the tumor, its tendency will be to flattening, in consequence of the resistance afforded by the tissues among or in which it is situated. If there is no compression exerted upon the tumor it may grow to any bulk and acquire any configuration or conformation.

They may be *simple* or *multilocular,* that is, they may consist of single cysts or of several cysts; large tumors are often composed of series of similar masses united together by fibrous or fibrous and cellular tissue.

The *color* of a tumor varies according to circumstances, a matter of comparatively little consequence in the consideration of the history of such a growth. It is only when a tumor is external, or grows in any of the mucous outlets of the body, as the nose, throat, anus, vagina, or lower extremity of the uterus, that we can observe the color, and in that way deduce important conclusions in reference to the nature of the affection. Thus when I look into a person's nose, and find that it is filled with a tumor having a whitish, greenish, or gelatinous appearance, much like that of an ordinary oyster, I make up my mind at once that I have to deal with a tumor which is benign, innocuous, or harmless in its character; if, on the other hand, the tumor is very vascular, red, or of a bluish or livid aspect, then I make up my mind that it is of a very different character, that it is fibroid; and if it is very vascular, scarlet in its complexion, liable to bleed, and growing very rapidly, then I make up my mind that I have to deal with an encephaloid tumor, or a tumor of a malignant character. So in regard to these growths as they occur in the vagina or the uterus. Color, therefore, is of importance when the tumor is exposed to view.

The *mobility* of a tumor varies in different cases. Some tumors are movable during the whole period of their existence, from their commencement to their termination, as, for example, when they are situated superficially. Thus a sebaceous tumor of the scalp can be readily moved about in different directions; so in regard to some other tumors, as the fatty, especially when pendulous. But there are other tumors which

have firm adhesions and are immovable, and cannot be pushed about from one point to another; and this is the case frequently from their very commencement, and they so continue during the whole of their connection with the parts in which they are developed. As a general rule, it is a good sign when there is a certain degree of mobility in a tumor. A tumor connected with a bone is generally immovably fixed. A malignant tumor, at a comparatively early period of its growth, *forms adhesions* in the surrounding structures, as is seen in cancer of the mammary gland. Here, during the progress of the affection, lymph is poured out between the affected gland and the surrounding structures, by which the parts become firmly united together, so that when we perform an operation for its extirpation, we are obliged to use the knife extensively in order to effect the detachment. So also in tumors of benign character when they are developed among the muscles, or when they are situated comparatively superficially; the pressure on the surrounding parts excites inflammation, lymph is poured out, and strong adhesions are formed. Again, a part may be bound down merely by the tension of the muscles, aponeuroses, tendons, and other structures, without any aid whatever from plasma, lymph, or fibrin.

The *sensibility* of tumors varies according to circumstances. The benign growth is rarely attended with any sensibility unless it compresses an important nerve. Then there may be pain, which may be stationary or constant; there may be numbness in the parts around and beyond the seat of the tumor, owing to compression of the nerves and the imperfect transmission of the nerve-fluid. Generally such tumors are free from pain, or if there be pain, it is comparatively slight; whereas in malignant tumors, especially in scirrhus, there is usually pain at a very early stage, and pain which goes on gradually increasing in severity until at length it becomes distressing, depriving the patient of appetite and sleep, and requiring anodynes for its relief.

The relations which tumors bear to the surrounding structures are worthy of consideration. Every tumor must have a habitation, a residence. It is developed at a particular point, and, as it increases in size, it gradually encroaches on the surrounding structures, until at length it has not room enough for its development, and then must produce more or less serious effects upon the adjacent parts as well as on the system at large. In consequence of this pressure, as well as the short life of some of these tumors, we find that there is a tendency to ulceration and to elimination.

The benign tumors generally retain their vitality unimpaired for a considerable length of time, frequently for many years. In many cases, especially in the malignant formations, ulceration takes place at a comparatively early period, in consequence of the pressure on the tumor exercised by the superjacent structures, and in consequence also of its peculiar organization; and in this way an open sore is formed, peculiar in its character, attended with a peculiar discharge, attended with a peculiar pain.

Occasionally there is important involvement of the lymphatic ganglions around. This is the case sometimes in the benign tumors, but comparatively seldom; whereas in the malignant formations, as scirrhus, melanosis, etc., the lymphatic ganglions usually become affected in a comparatively short time. The nearest lymphatic ganglions always suffer in this way; thus, in cancer of the penis, the lymphatic ganglions of the groin become involved; in cancer of the lip, those of the jaw and the chin; in cancer of the mammary gland, the lymphatic ganglions of the axilla are invaded; all this as a necessary result, as it were, of a contaminated condition of these structures from the preëxisting disease in the neighboring organ, tissue, or structure.

As already mentioned, I make two great distinctions of tumors or morbid growths: the *benign* and the *malignant;* the malignant are also known under the name of the heterologous, heteroclite, or heteromorphous formations.

BENIGN TUMORS.

Commencing with the more simple benign, innocuous, or harmless tumors, we have;—

In the first place, the *hypertrophic* tumor, the result of hypertrophy or supernutrition, a sort of outgrowth of the natural tissue, structure, or organ, where the formation occurs;—

In the second place, there is what may be called the *vascular* tumor, composed essentially of vessels in a state of enlargement and morbid alteration;—

In the third place, there is the *adipose* or *fatty* tumor, nothing but a hypertrophic condition of the natural adipose or fatty tissue, the tissue which occurs in such great abundance in certain individuals in different parts of the body;—

In the fourth place, we have what is called the *horny* tumor, or the corneous tumor, a tumor resembling the horn of some of the inferior animals, as, for example, the goat;—

In the fifth place, we have the *fibroid* tumor, or the fibrous tumor as it is not unfrequently called, a tumor composed essentially of a substance r sembling some of the preëxisting normal or natural tissues, as, for example, the sclerotic coat of the eye, the dura mater, the pericardium, the proper coat of the testicle, the aponeuroses, periosteum, etc., composed essentially of fibrous tissue;—

In the sixth place, we have the *cartilaginous* tumor, so called from the resemblance which it bears to the cartilaginous tissue, composed of a gristly texture, firmer than the fibroid tumor, less firm than the bony tumor—the enchondromatous tumor as it is sometimes denominated;—

Then, in the seventh place, we have the *osseous* tumor, the bony tumor, a tumor resembling essentially the natural bony tissue, resembling it but not identical with it, as you observe in the various specimens on the table;—

Then we have, in the eighth place, the *calcareous* tumor, or earthy tumor, a tumor of exceedingly rare occurrence, most generally found in connection with a degenerated lymphatic ganglion of the neck, groin, or bronchial tubes; or in the uterus, in connection perhaps with the fibroid or fibro-cartilaginous tumor of that organ;—

We have, in the ninth place, the *neuromatous* tumor, a tumor developed along the course of a nerve, composed of an expansion of the nerve-fibre, with the addition of a large quantity of the fibrous or fibroid element, such as that which enters so largely into the composition of the ordinary fibroid development;—

Tenthly, we have the *cystic* tumor, which is exceedingly common, and which may be an original growth, or it may simply be an outgrowth of the preëxisting structure;—

Eleventhly, we have the *hydatic* tumor, a tumor composed essentially of hydatids, found most frequently in the liver and in the ovary;—

Twelfthly, we have the *polypoid* tumor, met with chiefly in the cavities of the nose, the uterus, vagina, larynx, fauces, ear, urethra, and the urinary bladder, in a word, in the mucous outlets of the body; called polypoid from its resemblance to a polyp;—

And in the last place, there is the *myeloid* tumor, orig-

inally described by Lebert and Paget, a tumor the existence of which is not yet fully determined; my conviction is, judging from the history of this development, and from what I have seen of it, that it is nothing but a form of encephaloid tumor, fungus hematodes, or soft cancer, and consequently a malignant formation. We have, therefore, including the myeloid tumor of Lebert and Paget, thirteen distinct growths of this kind.

NO. I.—HYPERTROPHIC TUMORS.

The hypertrophic tumor is simply an outgrowth of a preëxisting structure, tissue, or organ; it is simply, in other words, hypertrophy of a preëxisting part, the result of supernutrition, of overgrowth, of inordinate vascular activity, attended with deposit of plastic matter, and the organization of this matter, so that, at length, it becomes part and parcel of the tissue with which it is incorporated. I can give you a good idea of this form of tumor by referring you to what so frequently occurs in enlargement of the tonsils. In persons of scrofulous temperament or predisposition, these glands are exceedingly liable to become enlarged, expecially in young children under the age of nine or ten; the slightest exposure to cold will bring on an attack of this kind; and when the enlargement has progressed to some extent, then this being the weak part of the body, whenever the patient takes cold, or is laboring under disorder of the general health, however induced, there will be apt to be an increased activity in these structures, followed by augmentation of their size. Now these organs exist in the natural state, and we account for the enlargement by supposing that, in consequence of the irritation or inflammation which takes place from the causes mentioned, there is an increased flow of blood to them, that their vessels become enlarged in consequence and thus carry more blood than in the normal state, and these vessels, under the influence of this irritation or inflammation, or both, deposit plasma, lymph, or fibrin, in larger quantity than they do in the natural state simply for the purpose of nourishing or keeping up the growth or vitality of these bodies; the fibrin is intimately connected with the process of nutrition, which, under such circumstances, is simply in a state of perversion; there is simply an increase of it, hypertrophy—and hence we say that a tumor of this kind is a "hypertrophic" tumor. So in regard to what is called goitre, bronchocele, or the "Derbyshire neck." It is an enlargement of the thyroid gland, situated at the sides of the larynx and upper portions of the trachea, consisting of two lobes connected at the middle line by what is called the isthmus of the gland. What the precise function or structure of this body is, has not been determined; but we know that it is liable to the formation of a tumor, especially frequent in certain regions of the world, as the mountainous regions of the United States, of Switzerland, Italy, Germany, France, the Indies, China, &c., from what cause, we cannot determine.

We have another instance of this form of tumor, in old age, in enlargement of the prostate gland. Then we have elephantiasis of the scrotum, consisting of hypertrophy of the skin and subcutaneous cellular tissue. Cases of this kind are on record where the tumor weighed respectively one hundred and twenty, and one hundred and sixty or sixty-five pounds, all due to an outgrowth of the skin and subcutaneous cellular tissue.

For the relief of these tumors, the surgeon must call into requisition sorbefacient remedies, locally applied and administered internally; when these fail, the organ must be retrenched, or, if need be, excised, an operation which is, however, generally impracticable. Such, in a few words, are the principles of treatment.

Reports of Hospitals.

NOTES OF HOSPITAL PRACTICE.

By H. D. BULKLEY, M.D.,

PHYSICIAN OF NEW YORK HOSPITAL.

The Medical Department of the New York Hospital has furnished during the month of October a variety of interesting and instructive cases, some of which are thought worthy of record.

The different forms and varieties of malarial disease have formed a large share of the whole number of cases, though not so numerous nor so severe as during some past years. There have been fewer of those severe cases of congestive fever which are always so alarming, and a much smaller number of cases of that form of cachexia produced by the malarial poison, so characteristic of the effects of its protracted influence, and fewer cases of visceral enlargements from this cause than were so common in past years. Whether this is to be attributed to the smaller number of sailors engaged in the Southern trade than formerly, or whether they remain a shorter time on shore, or whether prophylactic means are more generally used, it is difficult to say.

But two cases of the congestive form of malarial fever have occurred during the month, and these not of the most severe form. Both yielded to quinine, at first by hypodermic injection, and afterward by mouth. This mode of using quinine is now the rule of the house, not only in such cases, but in simple intermittents, both quotidian and tertian; and it is seldom that it fails to prevent a paroxysm after entering the hospital, if there is sufficient time for its action. Two injections of four grains each, with an interval of two hours between them, are usually sufficient for this purpose. Quinine is then given by the mouth to prevent their return. This mode of treating different forms of malarious diseases has proved both effective and economical. Not the slightest unpleasant result has occurred in its use except in one instance, when an abscess formed, which caused but little trouble.

Not a single case of uncomplicated malarial disease has proved fatal during the month, and it is rare that patients with intermittents have had more than the second paroxysm after entering the hospital; and while it is true that the cases, as a whole, have been less severe than during former years, it is no less true that much of this success during this as well as the past season may fairly be attributed to the hypodermic use of quinine, first introduced into use in this hospital by my colleague, Dr. G. M. Smith. Instances have occurred in which it was necessary to administer these before the patient was taken from the carriage, to enable him to be brought safely into the ward, and perhaps again on his way into the ward. Preparations are made to administer quinia in solution in sulphuric ether, as lately recommended, but no trial of this form of giving it was made before the close of the month.

Atropia and morphia are also constantly introduced in the same way in appropriate cases, and without any inconvenience during the present month.

CHRONIC DYSENTERY.

Three cases of chronic dysentery and two of acute were treated with large doses of ipecac, and with good results. The first case was that of a man thirty-nine years of age, who had contracted the disease in the East Indies about two years previously, and who had been in the hospital over eight months. He averaged about eight or nine bloody stools in twenty-four hours. He took

seven boluses of ipecac, consisting of ten grains each, taking three daily, and at the end of eight or ten days had one or two evacuations each day, fæcal and without blood. The second, a man thirty years of age, first had dysentery in India about fourteen months ago, and when treated in this way, was having twelve to fifteen dysenteric stools a day. He took ten grains of ipecac three times a day, for ten days, and soon had only one or two fæcal and natural passages every twenty-four hours. This man had at the same time albuminuria. There was some œdema of the lower extremities. His urine contained no albumen at the time, though some had previously been found in it; but the microscope showed hyaline casts and kidney epithelium, and oxalates. After passing stools of this character some days, he had a characteristic clay-colored stool. He then took two more boluses, which had the effect the first twenty-four hours of producing a free bilious stool, and a few days afterward he was only passing one natural stool daily. The third case of this group was a man thirty-six years of age, who contracted the disease in China eighteen months before, and who was having twelve or more bloody and mucous stools in twenty-four hours. He took four doses of ipecac of ten grains each, and in a few days was passing one or two healthy stools in twenty-four hours. All these cases had been some time under treatment, and had taken a variety of remedies without any permanent benefit.

The first of the patients with acute dysentery was a man of thirty years of age, pale and somewhat cachectic, who had been suffering with the disease about three weeks before admission, and had about five or six passages daily, either mucous or bloody, or fæcal, more or less mingled with blood. He had taken calomel and opium at first, followed by opium alone, but with only temporary benefit. After several relapses he took four of the doses, containing ten grains each, of ipecac, and was completely relieved in a few days, and left the hospital at the end of sixteen days, entirely well.

The second case of acute dysentery was that of a man who had bloody stools, mingled with fæcal matter, who took two of the boluses, with the effect of producing free bilious discharges, and with entire relief.

A sixth patient, who took large doses of ipecac, was a man who had been in the hospital nearly four months, who was suffering under rather copious liquid stools, nearly natural in color, three or four in twenty hours, which were suspected to be tubercular in their character. In this case the result was negative, as might perhaps have been anticipated from the nature of the case. He took three boluses in the course of one day, and two on the following day. He vomited a little the first night, but not afterward. The first effect was an increase of the quantity and frequency of the discharges, with a decided bilious tinge, amounting to ten or twelve stools in the twenty-four hours. The stools then resumed their previous character, and their usual frequency. This mode of treatment was then discontinued, on the supposition that this was not a case in which it promised success.

It is perhaps worthy of notice, in passing, that the first of these patients on the list, the man who had contracted dysentery in India two years previously, had distinct attacks of rheumatism whenever the dysentery was alleviated, and that this alternation between these diseases had attracted his own attention, and led him to speak of it. This corresponds with the observations of some of the older writers, who considered them as analogous diseases, and both owing to a similar disordered state of the blood. This was the view entertained by Akenside, in his Commentary on Dysentery, who called this disease a rheumatism of the intestines, and said that rheumatism and dysentery made frequent transitions from one to the other. I cannot recall, however, any other instance of such a relation between them, nor is it mentioned by writers generally.

Ipecac given in these doses usually vomits two or three times very freely, after which it is tolerated by the stomach. The first of these patients only vomited after the first bolus; the second, the one with Bright's disease, vomited for two or three days after the last bolus was taken; the third vomited but very little, and only after the first bolus. The fourth patient (the first with subacute dysentery) vomited only after the first bolus; no note of the second (acute) case was taken on this point.

A mustard poultice was generally applied over the epigastric region for about fifteen minutes each time before a bolus was given, but not always. Laudanum was not given in any case before the exhibition of the ipecac, as recommended by Surgeon Docker, of Bengal, who was the first to bring this practice into notice, more especially in acute dysentery. This gentleman gave much larger doses of ipecac, sometimes as much as a drachm and a half at a time.

No sweating was produced by this mode of treatment in either of these cases.

The action of ipecac given in this way is decidedly cholagogue, its exhibition being soon followed by an abundant discharge of bile from the bowels, generally with a considerable quantity of fæcal matter, and a relief of the tenesmus and of all irritation; and it is doubtless to this action on the liver, and the free flow of bile which results from it, that its beneficial effects on the disease are to be attributed.

During the months of September and October, 1861, I treated three cases of chronic dysentery and one case of chronic diarrhœa with large doses of ipecac, and with such good results that I was induced to bring them before the New York County Medical Society, in a paper which was afterward published in the fourth volume of the American Medical Times. Of these cases, the disease had lasted in one three months, in a second five months, in a third four months, and in a fourth some months, without stating the exact time. The first of these patients was having fifteen to twenty stools in twenty-four hours at times; the second, eleven or twelve stools during the same period; and the third, sometimes as many as twenty, and seldom less than eight or ten. The number of stools in the fourth was not noted. The stools became nearly or quite natural, in the first case, at the end of eight or ten days; in the second, at the end of eight days; the third was in full convalescence in the course of a week. In the fourth case, so great a change was caused by a single dose of ten grains of ipecac, which produced neither nausea nor vomiting, that the patient left the hospital in a few days, after having been there under treatment for some months.

Dr. McKidd reports a case in the Edinburgh Medical Journal for July, 1861, in which a diarrhœa which had lasted ten years was almost entirely checked by the end of the first week by doses of twenty grains of ipecac (reduced in a few days to ten grains) every twelve hours; and it was this report which led to the trial of it in the preceding cases.

Three cases of albuminuria were treated during the month with the bichloride of mercury, and with satisfactory results. One of these was a boy about sixteen years of age, who had been suffering from the disease two or three years, who had never had scarlet fever, and whose disease could only be traced to exposure to alternations of temperature, and to damp and wet weather. He had granular and hyaline casts in his urine, and his body and limbs were much distended with fluid. The

dropsical effusion had subsided very much, his general condition was much improved, and when the urine was examined near the end of the month, no casts were found in it. In a second case, in which granular casts were found, this remedy was also found useful. The third case was that of a stout, well-developed man, who entered the hospital about the middle of the month, who was very much swollen, and whose urine contained a great abundance of albumen, and microscopical signs of an acute attack, and whose attack was directly produced by exposure to cold and wet. He was decidedly improving under the use of this remedy when he was discharged by request. The hot vapor bath had also been used in his case, but without marked effect. The dose of bichloride used in all the cases was one thirty-second part of a grain, in the compound tincture of gentian.

One case of chorea, of a rather mild form, in a boy about fourteen years of age, which had existed about two years, was treated with the bromide of potassium, in doses first of ten, and afterward of fifteen, increased to twenty grains, three times a day, but with little if any perceptible effect on the disease.

Rheumatism in its different varieties and forms was fully represented in the wards during the month, and there were a few cases of typhoid fever; and, as usual, some cases of delirium tremens—but we do not propose to extend our paper by remarks on these. The whole number of patients under treatment during the month was 219, and the total number of deaths, 8, or a little less than 4 per cent.

NEW YORK, November, 1867.

Progress of Medical Science.

GENTIAN ROOT AS A DILATOR.—Professor Winckel in Rostock recommends (Deutsche Klinik, 1867) the radix gentianæ rubræ as a new, simple, and cheap means of dilatation for surgical and gynecological purposes. His attention was first directed thereto by an article of John Jacob Haeberl, published in 1834, in which the author states that having operated for atresia uteri and desiring to keep open the orifice made by the trocar, he introduced a good, firm plug of radix gentianæ, and that on the following day he found no small difficulty in withdrawing the same, which had increased to twice its former size. According to Dr. Winckel's observations the gentian root has the following advantages over laminaria: 1st. Its cheapness, the ease with which it can be obtained, and the fact that the physician can so easily cut plugs and bougies of any size to suit his requirements. 2d. Its somewhat smaller power of absorption, as compared with laminaria, is compensated by our being able to obtain larger pieces of it (one and one-half to two inches in diameter) so that it can be used for the dilatation of openings already too large for laminaria. 3d. The fact of its *remaining free from smell* constitutes an immense advantage, for even laminaria, though in a much less degree than sponge-tents, often becomes quite fœtid.

The radix gentianæ may therefore be used with special advantage in strictures of the vulva, vagina, and uterus; for tamponing the uterus in smaller hæmorrhages, for the induction of abortion, for dilatation after operations for atresia of the genital organs. Whether it is also applicable to stricture of the urethra, to affections of the lachrymal ducts, etc., remains to be seen.—*All. Med. C. Zig.* 1867.—*Memorabilien.*

REMOVAL OF THE SCAPULA, HALF OF THE CLAVICLE, AND THE WHOLE ARM; DEATH ON THE THIRD DAY.—Sir William Fergusson lately performed this operation upon a patient in King's College, London, it being somewhat similar to the one done by him two years ago, and reported in our columns, this making the second one of the kind performed in London. The following account of the case is taken from the London *Lancet:*

Josiah B——, aged forty, married, late of Queens land, New South Wales, was admitted into the hospital on the seventh of October last, with a large osteo-sarcomatous tumor, involving the left scapula, shoulder-joint, and adjacent parts. Two years ago he fell on the left shoulder and cut it open against a sharp edge of wood. The wound healed in a fortnight, leaving a cicatrix, which is now visible. Two months afterward he noticed that the shoulder was becoming painful; and, in three months, that a tumor was appearing. It increased rapidly for six months. He went to Sydney, where he was advised to come to England. The size of the tumor remained stationary from the time of his visit to Sydney till two months ago, since which time it has again increased rapidly. He has had a numbing pain in the shoulder ever since the commencement. This pain has been worse of late. He has always enjoyed robust health. He says that his father died after the removal of a tumor from the back. He is to all appearances a strong man; and, with the exception of the tumor, in a good state of health. There is a large tumor in the left scapular region. It is smooth, in parts very hard, giving a bony sensation. The skin is freely movable over it, and perfectly free from disease. It moves easily with the scapula; but is immovable in its deep attachments. It occupies the whole of the space behind the scapula, and takes three palms of the hand to cover it. It also projects downward into the axilla. Here it is very hard, and the covering of skin is thinner than elsewhere. The growth goes forward under the clavicle, but does not go above it into the clavicular region of the neck. The subclavian can be readily compressed against the first rib. The arm is freely movable backward and forward, going with the scapula, but it cannot be directly abducted.

The following were the chief steps of the operation, which was brilliantly performed before a crowded theatre. The patient, under the influence of chloroform, was placed on his right side, well over to the right edge of the table. Mr. Wood compressed the subclavian artery. Mr. Henry Smith assisted on the right, and Mr. Trevor, the house-surgeon, on the left side. Sir William stood on the right side. The first incision was over the outer third of the clavicle, which was sawn through; then a long, sweeping cut from this point, curving down in front of the shoulder, round the arm, over the deltoid, to the inferior angle of the scapula. The shoulder-joint was found to be involved, the humerus being almost immovable. The flaps were then dissected off from the scapula, and the muscles divided along the upper and ventral borders of this bone, which, with the arm, was well tilted forward, and the knife carried round with a circular sweep to the clavicle, whence the incision had first started—the important vessels and nerves being divided, so to speak, by the last cut. The flaps were then sponged, and the main vessel and others secured. Mr. Wood had the subclavian so well under control that there was no bleeding from it, and very little from the smaller arteries; the man lost but six ounces of blood at most. Some spicula of bone were dissected from the posterior flap, and a piece sawn from the outer end of the clavicle, which was too long. The flaps, which were abundant, were brought together by sutures, and water-dressing and strapping applied. The man was under the influence of chloroform during the whole of the operation, but seemed to feel a shock when the

main vessels and nerves were divided. The tumor, which was of an osteo-sarcomatous nature, was sent to the Royal College of Surgeons. The patient expired at the end of the third day, from the combined effects of the shock of the operation, and the existence of fatty heart, fatty kidney, and fatty liver.

Fractures at the Hip; the Nature of the Lesion, and its Treatment.—Dr. H. G. Davis, in an interesting chapter on fractures (*Conservative Surgery*), takes occasion to refer to the characters of intra and extra capsular fractures. After alluding to the strength of the neck of the femur, and its capability of bearing any amount of weight from below upward, he asserts that when the force is applied in the opposite direction a strain is brought upon the cervix in its most defenceless position. This is accounted for by the degree of obliquity of the neck of the bone, and the direction of the cancelli that support the articulating head. One set of these fibres, arranged in the form of a cone, with the base resting upon the buttress of the cervix, run upward toward the head of the bone, in the direction of the line of the pressure, while a few fibres are arranged in a similar manner upon the upper portion of the neck, but with the difference that their base is toward the head of the bone. The intermediate fibres between these two cones are more or less interlaced.

It is this direction of these braces of support to the head of the bone that mechanically disposes in a fracture a portion of the bone to split in a more or less oblique direction. The break commences upon the upper side, and extends transversely until it reaches a point near its lower surface, where the resistance will be least in a longitudinal direction. Hence it will split in a wedge-shape, the apex of which may or may not extend under the capsular ligament, retaining its connection with the neck of the bone, through both the capsular ligament and the periosteum. When the force is applied in an opposite direction the direction of the fracture will be different. In both instances the fracture at first takes place transversely, and after following such a course through the greater thickness of the neck the line of fracture is deflected in the course of one or other of the oblique fibres, and split off, so to speak. It is this split portion which, according to Dr. Davis, bears such an important relation to the proper treatment of fractures at the hip-joint. If the parts after such injuries are handled with care, and the surgeon is not over-anxious to get crepitus, the necessary connections of this wedge-shaped splinter and the periosteum will be preserved, thus augmenting the chances of bony union.

In support of this view he not only quotes examples in which the fracture has taken this course, but refers to the fact that in a large number of cases there is at first but a slight shortening of the limb; that occasionally locomotion is performed for some days, when shortening takes place suddenly. He also alludes to the fact that it not unfrequently happens that when slight shortening exists at first, and the limb is manipulated, extreme shortening occurs, and crepitus is only then secured. He considers it best to run the risk of making a correct diagnosis by giving the patient the benefit of a doubt, and employing the continuous elastic extension. If at the end of a few days the urgent symptoms subside, as in the case of a severe bruise, a cautious use of the injured limb may be allowed, while the treatment by the elastic extension is equally applicable to both. He is willing to admit that bony union is rather a forlorn hope, but he believes that the only chances that it may occur are centred in care in conducting the necessary examination of the limb. If, however, a surgeon is determined to get crepitus in every case when there is reason to suspect that the continuity of the bone is not absolutely destroyed, no union of the parts can necessarily occur. The shaft of the femur is drawn up by the muscles, and when a reduction is attempted, the lower edge of the trochanteric portion impinges against that of the neck, and as the only attachment of the head and neck to the pelvis is by the round ligament, they rotate upon it, thus bringing the upper outside portion of the cervix, and perhaps a part of the head, in apposition to the fractured face upon the shaft. Then the head of the bone, from the scanty nourishment it obtains by means of the round ligament, soon falls a prey to absorption, the limb becomes permanently shortened, and the patient incurably lamed.

The method of treatment pursued by Dr. Davis in these cases is similar to that of continuous extension by the weight and pulley, as recommended by him in the treatment of morbus coxarius; the idea being to keep the parts in their natural relations, and the limb in its normal length, giving nature the best possible chance.

If these views prove to be correct, and they certainly appear reasonable, Dr. Davis has, in a portion of the cases of inter-capsular fracture, relieved the profession from what has heretofore been considered an insurmountable difficulty, and has furnished strong evidence of the necessity for a thorough investigation into the "mechanical causes operating injuriously, both in health and disease."

Ointment for Pruritus Vulvæ.—℞. Pure (or camphorated) lard, 60 grammes; citr. oint. 3 grammes. M. Rub a small piece on the parts while in bed. Should the pruritus resist this topical application, analyze the urine. If glucosuria should be found to exist, add to general treatment M. Bouchardat's unguent, to wit:

℞. Potass. carbon. 100 grammes; tinct. benzoin, 50 grammes. M.

M. Adrian's Formulas for tar preparations are, viz.:

Emuls. of Vegetable Tar.

℞.	Choice tar, . . .	10	grammes.
	Yellow of one egg, or .	15	"
	Water, ...	75	"
		100	grammes.

Glycerined Tar.

℞.	Choice tar, . . .	15	grammes.
	Yellow of one egg, or .	15	"
	Glycerine, . . .	70	"

(1 grain equals 18 grammes.—Ed.)

Spina Bifida.—Dr. Fazeuilhe (of Rieumes) having to deal, in the case of a new-born child, with a voluminous spina bifida, and adherent by a pedicle of three centimetres in diameter, did not hesitate, after evacuating with a trocar the limpid serosity contained in the tumor, to excise it, following the surgical method of M. Dubourg (of Marmande) as given in two successful cases, reported in the *Journal de Médicine Pratique*. In chronicling this new audacity the *Journal* rightly recalls the reserve which men of experience, such as MM. Guersant and Giraldes, held in regard to curative means employed in spina bifida. M. Guersant did not believe at all in the radical cure of this affection; and among the sequelæ to the operation, M. Giraldes determined among other things a case of hydrocephalus.

M. Fazeuilhe is, to appearances, too confident. His example, at all events, should not be followed in every case.—*La France Medicale*, Oct. 16, 1867.

Maissonneuve, of Paris, recommends for the radical cure of varicocele, coagulating injections of the perchloride of iron.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & Co. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, January 1, 1868.

"IS HE RELIABLE?"

IT seems strange, at first sight, that as the whole object of science is truth, there should be any question in regard to so-called scientific facts. All of us are, however, aware that statements intended to be scientific are constantly open to every conceivable doubt as to their authenticity. How fashionable has it become, when any startling assertion is made by a professional brother, for one to ask the other, "Is he reliable?"

The question is a perfectly natural one, for it is necessitated by the circumstances of the case. Whatever may be the implication of want of truth on the part of the observer, the real cause for doubt rests upon the conviction that the assertions are too apt to be exaggerated, and savor of a one-ideaism. The majority of men who engross themselves in one pursuit, or in one particular department of a calling, seem incapable of resisting the temptation of presuming it paramount to everything else. They get, so to speak, in that habit of mind in which their imaginative faculties outgrow their reason and common sense; and, while they have no desire to overreach the truth, seem incapable of sticking to it. This curious psychological state is strikingly illustrated in a story told by a celebrated humorous writer.

It appears that a traveller, who was very anxious to take a stage very early in the morning, put up the night before at a roadside tavern near the station, and left instructions with the porter to be waked in time. He then retired with the full assurance that his wishes would be complied with, and settled himself for a comfortable night's rest. But, alas! in the still small hours he was aroused by an ominous whisper through his key-hole, "Mister, the stage has just passed." This piece of intelligence was sufficient to expedite his toilet in an astonishing manner; his legs were thrust into his pants, his boots were stamped on, his coat quickly found its place upon his back, and, with satchel in hand, he was soon in readiness, along with his informer, for some violent exercise in the effort to overtake the vehicle at its stopping-place. Fences were cleared, ditches leaped, and, by dint of much running, the station was reached. On inquiry, however, it was discovered that the carriage was not due for two hours. The indignant traveller turned upon his companion, and charged him with the perpetration of a rather serious joke. The answer which he received was: "You see, Mister, from thinking of the coach, from expecting it, from wishing for it, and dreaming on it, I thought I heer'd it!"

There is no difficulty in meeting with cases parallel to this in scientific investigations; and we should be as ready to exercise forgiveness toward such observers, as we will suppose, "for the argument's sake," was the victimized traveller towards his guide. If any individual coaxes himself to believe that his particular method of treatment is the *ne plus ultra* of everything that is desirable, he is very easily tempted to conform his theory to facts, rather than the facts to the theory. There is in such persons a constant tendency to exaggerate every element that bolsters up their views, and to make light of every other circumstance tending to refute them. They are convinced that an operation by a particular method must succeed, and will hardly believe that their expectations have not been realized, even when the patient is dead.

The power of the imagination over other faculties is also as marked as it is subtle, even when an investigator shows a determination to guard conscientiously against every source of error. Every medical student knows this full well from personal experience, especially in the study of those branches which require a more than ordinary acuteness of perception. We need not refer here to more than two of these, auscultation and microscopy. If he listens for a particular sound in the chest, in the belief that it is there, he invariably hears it, though it may be entirely absent. Under the microscope he makes out delicate definitions, which cannot possibly be developed by the lens of the power he is using. All this, it is well known, does not depend entirely upon a want of sufficient acuteness in hearing in the one case, or of focal adaptation in the other.

But there is another class of observers who are less conscientious, and who are not only chicken-hearted about telling the plain truth, but who sometimes wilfully pervert everything to meet their ends. The supposition that this is the case, is the only rational one for explaining the many discrepancies and glaring untruths that are scattered throughout their works. They claim for their personal experience more than is by the greatest stretch of imagination their due, and speak of successes which are to every reasoning mind simply impossible. These impostors are self-conceited enough to suppose that their trickeries are not transparent; and there is no consideration of justice on their part that will tempt them to mend their ways.

True science, dealing as it does with stubborn facts, with laws that are unchangeable, and with conclusions that are logically irrevocable, can give no quarter to speculations however ingenious or captivating, and every element of the imagination must necessarily be left out. We admit, that in order to follow the tortu-

osities of this thorny path, much sacrifice of mere opinion is necessary, many pleasing and tempting deductions must be overthrown, and everything in the shape of a prejudice for or against any particular view be resolutely combated. (When so much is required of the would-be votaries to this shrine, is it a wonder that so many grow weary, and fall out by the way?)

But on the other hand, there are multitudes of honest workers who have conquered every prejudice for this or that theory, who look through a lens without a single aberration, and who are willing to labor for the fascination of discovering truth in its purity. These are they who are ever ready to report unsuccessful results, errors in diagnosis, and mistakes of every kind; who, in the true interests of science, are not only searching after pleasant paths, but are willing to point out the pitfalls which they have escaped and fallen into. Observations from such men are always reliable, and their deductions are always sound. Their cases are accurately detailed, every point concerning which there may be a doubt is clearly presented, and nothing is left to be desired in the way of completeness.

It is preposterous for any one to suppose that unless he fairly earns a reputation for reliability by an honest endeavor to adhere to simple facts, untinctured by prejudice of any kind, that his works can endure.

The following out of this principle has given to us every illustrious name in medicine. Their works are handed down from past ages, not merely as curiosities in literature, but because of the manly and outspoken truths which they contain, truths which every recent observation serves only to confirm, and add new lustre to the fame of the writer. Some of the descriptions of disease by the ancient authors are, in fact, so accurate, that a literal translation of them would serve every purpose at the present day. How dangerous would it have been for such to have drawn on their imaginations, to have perverted facts and the like, when an army of uncompromising truth-seekers were waiting to prove their statements by the test-tube, the retort, the post-mortem knife, and the microscope!

UNDER Reports of Hospitals we propose, in addition to accounts of important cases, shortly to present a series of articles descriptive of the practice of the various hospitals of New York in the more common affections, incorporating such clinical teachings of the attending physicians and surgeons as may serve to illustrate the subjects treated. We hope to make this department of the RECORD especially valuable to those of its readers who have not the opportunity of personally availing themselves of the immense hospital advantages our city affords.

OWING to the unusual press of matter we have been compelled to defer the publication of several original articles of singular merit, among which may be mentioned one by Professor Salisbury, of Cleveland, Ohio, which is profusely illustrated, one by Dr. Rogers on an important subject, and an interesting report of a case by Dr. Hachenberg, of Hudson.

THE full attendance at the various societies, and the great amount of interest manifested in the discussion of the various medical topics, are very significant of an increase among our active workers. There is nothing that conduces so surely to mutual improvement and an increase of our knowledge than such associations, and we are gratified to chronicle the fact that so many of them are so well patronized.

Reviews and Notices of Books.

CATALOGUE OF THE U. S. ARMY MEDICAL MUSEUM. Prepared under the Direction of the Surgeon-General, U. S. Army. Washington: Government Printing Office. 1866-7. Pp. 961.

SURGEON-GENERAL BARNES deals in surprises, and of the most agreeable kind. The very modest title of "Catalogue" conveys but a faint idea of the interest or value inherent in the closely-printed and profusely illustrated volume before us. It is indeed something more than a catalogue, since the numbered specimen and name of contributor is invariably accompanied by a succinct description and history, calculated to satisfy any reasonable amount of curiosity regarding results. As a careful compilation, seeking to record for the benefit of science duly authenticated facts, it is a monument of labor, destined never to be too highly appreciated. The fortunate possessor of this contribution to the history of the late contest might well hesitate to exchange positions with the spectator in the museum itself, since he is able to command at his convenience the studied details and the wealth of facts without the bewilderment of artistic embellishments and the embarrassment regarding the point of commencement.

About three-fourths of the Catalogue, as was to have been expected, is devoted to the department of surgery. The general scope of this grand division may be best gathered from the following summary of diseases and injuries, as given in the table of contents: (1) Cranium; (2) Face; (3) Vertebræ and Cord; (4) Thoracic Parietes; (5) Shoulder-joint; (6) Shaft of Humerus; (7) Elbow-joint; (8) Shafts of Radius and Ulna; (9) Carpus; (10) Hand; (11) Pelvis; (12) Hip-joint; (13) Shaft of Femur; (14) Knee-joint; (15) Shafts of Tibia and Fibula; (16) Tarsus; (17) Foot; (18) Organs of Circulation; (19) Organs of Respiration; (20) Abdominal Viscera, etc.; (21) Results of Operations on Soft Tissues; (22) Injuries to Soft Tissues not Viscera; (23) Erysipelas, etc.; (24) Tumors; (25) Casts; (26) Photographs and Drawings; (27) Weapons and Projectiles; (28) Materia Chirurgica; (29) Miscellaneous Articles; (30) Lower Animals; Index of Contributors and Index of Specimens.

Each one of these sections is properly subdivided; as, for example, in the case of "Injuries and Diseases of the Face, including the Organs of Vision, Smell, and Taste," the subject is treated with reference to gunshot injuries, injuries not caused by gunshot, and diseases and their results. These gunshot injuries are then classified as being "Of the Bones of the Face, not including the Lower Jaw; Of the Lower Jaw; Of the Eye and of the Tongue." Another subdivision finally disposes of the "Gunshot Injuries of the Bones of the Face not including the Lower-jaw," under the captions of

'*Fractures not Primarily Fatal; Fractures without Operations, Secondarily Fatal; Results of Operations; Results of Exfoliations; Fractures and Dislocations indirectly produced which are not in themselves Fatal.*" We have selected the above at random, and, as the reader will perceive, have not pursued the matter down to the necessary minutiæ; but we trust that enough has been given to impart an idea of the general plan of the work.

To Dr. Alfred A. Woodhull, Assistant Surgeon and Brevet Major, U.S.A., is due the honor of having prepared the surgical portion of the Catalogue. His descriptions of the specimens are singularly graphic, pithy, and exhaustive. As far as condensed expression is concerned they approach the suggestiveness of Scriptural texts. And when we consider the temptations to amplify, this is indeed a rare merit.

When we say that Dr. Woodward has grouped the objects of interest for the medical department of the museum, we know that our readers will be well assured of the completeness, the judgment, and the taste displayed in the execution of his onerous, and, as we surmise, pleasant task. An accomplished pathologist and an accurate observer, he has made the most of his opportunity, and reflected no little lustre upon the hard-working and not enough appreciated medical department of our army. Much has been required, but more accomplished.

The Table of Contents will give better than any extended *critique*, an idea of this division of the work. Chapter I. (Nervous System) introduces us to specimens illustrating lesions, etc., of the *brain*, *membranes of the brain*, *pineal gland*, *bloodvessels of encephalon* and *spinal cord*. Chapter II. (Organs of Circulation) presents us with the results of autopsies, exhibiting morbific changes and congenital anomalies of *the heart*, *arteries and veins*, *lymphatic glands*, and *thyroid gland*. Chapter III. (Respiratory Organs) is rich in dissections of the *air-passages*, the *lungs*, and *pleuræ*. Chapter IV. (Digestive Organs) adds not a little to our knowledge of the diseases of the *mouth*, *pharynx*, and *œsophagus*, the *stomach*, *intestinal canal*, *peritoneum*, and *omentum*, *liver*, *pancreas*, and *spleen*. Chapter V. (Urino-genital Organs) is quite suggestive. It is subdivided under the head of *kidneys*, *suprarenal capsule*, *urinary passages*, and *bladder*, *male organs of generation*, *female organs of generation*, and *fœtus*. Chapter VI. (Organs of Locomotion) is disposed of under two sections—*muscles and fascia*, *bones and joints*. Chapter VII. (Integument) and Chapter VIII. (Anomalies and Monstrosities), followed by a copious index, close this portion of the Catalogue.

The embellishments are also fine. No. 98, from a specimen just above the ileo-cœcal valve, exhibits in a very artistic manner, the appearance of the ileum, with enlarged follicles, etc. No. 280, taken from a case diagnosticated as typhus, points out "the solitary follicles, enlarged to size of small shot, and projecting as polypoid tumors from surface of mucous membrane; at the apices of many of these tumors are one or more small points of ulceration." No. 468 very ably and elegantly reproduces "A portion of descending colon considerably thickened, and presenting numerous follicular ulcers, varying in size from mere points to three lines in diameter;" and No. 224, follicular ulcers of the colon, which have degenerated into "vast eroding excavations." These complete the illustrations of the medical section.

Another portion of this magnificent publication is devoted to an enumeration and description of microscopical specimens. This department has been very wisely entrusted to Assistant Surgeon Edward Curtis, who has achieved an enviable reputation for indefatigability and fidelity. We are told that a large majority of the specimens have been prepared in the microscopical department of the museum, the greater part by Acting Assistant Surgeon J. C. W. Kennon, U. S. Army; the remainder by Assistant Surgeon Edward Curtis, U. S. Army, and Hospital Steward E. M. Schaeffer, U. S. Army. Professor Joseph Hyrtl, of Vienna, Austria, is also represented by a number of "opaque fine injections in various colors to show the arrangement of the capillaries in the different structures of the body." These are mounted dry.

The microscopical section of the museum is conveniently subdivided; its objects for inspection being classified as "Mounted Preparations for the Microscope;" "Photographic Negatives of Microscopic Objects," and "Photo-micrographs presented to the Museum."

To say that the wealth of the museum in this respect is enormous, would give but a faint idea of the extent or completeness of the collection. Aside from the physiological specimens, which are derived from almost every family in the animal scale, pathological anatomy may here be advantageously studied by its most enthusiastic votaries.

Photo-micrography has been well worked up. We have illustrations of the apparatus and descriptions of the process, with a reason for every step taken, which to the scientific operator cannot be otherwise than exceedingly valuable. Dr. R. L. Maddox, of Southampton, England; Prof. Joseph Gerlach, of Erlangen, Bavaria; Dr. C. F. Crehore, of Boston, Mass.; Mr. J. H. Woodworth, of Dublin, Ireland, and a few others are credited with specimens presented.

The Catalogue, as a whole, well assures us that the Surgeon-General has conscientiously devoted his energies to the task, which we are proud to say we have every reason to believe has been performed without reluctance, and entirely in the interest of science. The work of compilation, attended as it is with the necessity of elimination and condensation, though tedious we can now very readily see has steadily progressed, and that the condemnatory resolutions introduced before the American Medical Association at its last meeting were, to say the least, injudicious, if not an unwarrantable reflection upon a faithful public officer. That they did not prevail was due to the appreciation in which that officer is held by the profession, as well as to the fact that of the members of that Convention, not a few were content "to keep their souls in patience," well satisfied that the future would vindicate the wisdom of the order denying promiscuous reference to documents, even on the part of authors themselves.

TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION. Instituted 1847. Vol. xviii. Phila.: 1867. 8vo, pp. 548.

THE Transactions for the present year is filled with interesting and practical matter for the profession at large, and reflects credit upon the last year's doings of this representative body. Our readers have already been presented with a full report of the proceedings in Cincinnati, so that there is no need for our referring to the contents of that portion of the volume occupied by them, except to state that the report is carefully drawn up by the permanent secretary. We have, however, more to do with the many elaborate and well-written papers which are contained in it. The address by the president, Dr. H. F. Askew, of Delaware, is a bold and manly expression of opinion concerning the present status of our art, and the radical methods to be adopted to raise its standard. Dr. Stephen Rogers' paper on extra-uterine fœtation has contained in it some original views in reference to the method of diagnosticating its existence, as well as the treatment of the attendant hæmorrhage. He asserts in substance

that colicky pains in the hypogastric region, attended with a sanguinolent discharge per vaginam, are almost pathognomonic, all other things being equal, of extra-uterine pregnancy; and as statistics have failed to prove to him that a single case of hæmorrhage accompanying this condition ever recovered, he advises abdominal section and the securing of the vessel. His arguments in support of this latter view are well put, and deserve the consideration of every interested party. Dr. Taylor's paper on heart diseases in the army is very practical in its character, and refers principally to the frequency with which dilatation of the left ventricle is met among those who are exposed to great fatigue and privation. Dr. Hamill's report on the medical topography of Illinois is a valuable statistical contribution to sanitary science. Its extreme length will perhaps interfere with a general reading. Dr. Hildreth's observations on the application of belladonna to diseases of the cornea will be read with interest by those whose practice tends towards ophthalmology. The report on the use of plaster of Paris bandages, by Dr. J. L. Little, is a praiseworthy attempt to bring to the notice of his brethren a very useful practice; but, as our readers are already acquainted, in a measure, with the gentleman's views, we pass on. Dr. B. Howard contributes a short and extremely valuable paper upon a new method of treating varicose veins, by ligation with silver wire in the first place, and depletion of the ligated vessels in the second place. The plan is a commendable one, and deserves a trial. The report of the committee on ligation of the subclavian, by Dr. Parker, gives evidence of much research and careful study. There is contained in it a tabulated statement of one hundred and fifty-seven cases; but the chief value of the report is centred in the conclusions which a faithful study of the statistics of the operation has afforded. The same may be said of a well written and elaborated article upon the hip-joint operations during the late civil war, by Dr. Paul F. Eve. The report upon the rank of the naval medical staff is full of significant facts, which are well presented and conclusive as to the necessity of radical reforms in that department. The report on American medical necrology, we are sorry to say, is by no means complete, and in many portions of it there is evidence of an undue haste in its preparation. The report on medical education presents no new facts, aside from those already referred to in our columns, when discussing the subject. Dr. Post's report on medical literature is well and tastefully written, and gives all the desired facts with a charming and commendable conciseness. Dr. Isaac Ray's paper on the progress of knowledge in insanity is full of sound reasoning and useful and common-sense suggestions. Lastly, the two prize-essays, by Dr. Black, on the cause of intermittent and remittent fever, and by Dr. Pallen on the treatment of certain uterine abnormities, are worthy of particular mention for the amount of study and work which each gives evidence of. Dr. Black's views are to a certain extent original, and the plain and common-sense arguments which he urges in their support will strongly appeal to the judgment of the profession for widespread adoption. Dr. Pallen has also given us many interesting facts bearing upon his subject, but his plans of treatment for uterine affections can hardly be recommended for safety. The Western women may be proof against bad results from the operations which he proposes; but our Eastern females certainly lack much of that necessary stamina.

The meetings of the different sections are by no means represented as they should be. In them, many of the papers referred to in the volume were fully discussed, yet we have in the reports of their respective secretaries the merest mention of such facts. This should not be so. In the interest of the section, no gentleman should accept the office of secretary without a full appreciation of the responsibility attending it, and should in one and all cases be prepared to give a decently full report of the remarks made thereat.

The treasurer, in his annual report, tells us that the association is in debt for the publication of its transactions. This is a grave reflection upon the character of the body, in not liberally supporting every laudable effort to place before its members much valuable material. We are in hopes that the sale of the present volume may exceed its predecessors in just so much as it does in literary and scientific merit.

THE PRACTICE OF MEDICINE AND SURGERY APPLIED TO THE DISEASES AND ACCIDENTS INCIDENT TO WOMEN. By WM. H. BYFORD, A.M., M.D. Author of a Treatise on Chronic Inflammation and Displacements of the Unimpregnated Uterus, etc. Second edition, enlarged. Phila.: Lindsay & Blakiston. 8vo., pp. 616.

PROF. BYFORD'S book may safely be said to fill a gap in a most important department of the healing art. The treatise is as complete a one as the present state of our science will admit of being written, and not only gives us the cases in which the knife is to be called into requisition, but fully discusses all those uterine ailments which are to be benefited by medical treatment. In this latter respect, the work has a peculiar value to every general practitioner. The author speaks from experience, evidently with the sole object of presenting his subject in a strictly impartial and scientific light. The present edition is much enlarged in point of matter contained in the work, although the volume itself is very little, if any, increased in bulk. We commend it to the diligent study of every practitioner and student, as a work calculated to inculcate sound principles, and lead to enlightened practice.

A BIENNIAL RETROSPECT OF MEDICINE, SURGERY, AND THEIR ALLIED SCIENCES. Edited by MR. H. POWER, DR. ANSTIE, MR. HOLMES, MR. THOMAS WINDSOR, DR. BARNES, and C. HILTON FAGGE, for the New Sydenham Society. Phila.: Lindsay & Blakiston. 1867. 8vo., pp. 496.

THIS volume, published under the auspices of the New Sydenham Society, now makes its welcome appearance bi-annually instead of yearly, as heretofore. It is the most carefully prepared retrospect with which we are acquainted. Each department is in charge of a gentleman of reputation, and everything is done to summarize, in a very readable way, all the more important advances in medicine over the globe. It is handsomely bound and elegantly printed.

HUFELAND'S ART OF PROLONGING LIFE. Edited by ERASMUS WILSON, F.R.S. Author of A New System of Human Anatomy, etc. From the last London edition. Philadelphia: Lindsay & Blakiston. 1867. 12mo., pp. 298.

THE Art of Prolonging Life was written more than half a century ago, by Christopher William Hufeland, a professor of medicine in the University of Jena, since which time, on account of a deserved popularity, it has gone through several German editions. As early as 1794, it was first translated into English, probably by the author himself. Although subsequent English translations have appeared since then, none could compare with the original one in elegance and exactness. Prof. Wilson has recently taken upon himself the task of editing the first translation, and adapting it to the wants of the present generation, and has been eminently successful in the endeavor.

In the present age of fast living, such a work as the

above has a novel interest. Founded as the statements are upon facts, they appeal, in trumpet tongues, to every man of common-sense. No one who reads it can quarrel with the author's intentions, even if he is not prepared to accept the conclusions. The relations of the moral to the physical nature are philosophically set forth, and the whole forms a complete though short treatise upon the several fundamental questions relating to the prolongation of life. He maintains that the duration of life in a being will be proportioned to the innate quantity of vital power, the greater or less firmness of its organs, the speedier or slower consumption, and perfect or imperfect restoration. When all these conditions exist, and are preserved by a reasonable amount of care on the part of the individual, the chances for exceeding the three score years and ten are proportionately great. This principle of preservation is one that is, however, hard to follow at the present day, as we are forced by all the external circumstances of our living to think faster, work with more rapidity, and worry more over the chances of success than did our forefathers, and in proportion as we increase the draught must we consume the fuel. Still, a happy medium can be consistently drawn between the two extremes, and by a proper observance of the relations of the physical to the moral element of our nature, many years of comfort and happiness may be added to our lot. If we are determined to burn our fuel rapidly, let us allow our vital energies to become recruited by rest, instead of adding to them the additional burden which unnecessary exciting excesses, improperly denominated pleasurable recreations, impose. The foundation of a prolonged life rests in the possession of a good digestion and a consequent excellent appetite, for all those who have attained a great age possessed these qualities to a remarkable degree, and retained them to the last. In nothing do the present generation pay more severely the penalty of civilization than in the deprivation of these inestimable blessings—a fact sufficiently explained by the increased mental excitement which we are subjected to, no less than in the trickeries of fancy cooking, and the great tendency of the teeth to premature decay.

The work is a charming one—the style is plain and unassuming, but is enriched by the soundest philosophy and the broadest common sense. The anecdotes of long-lived celebrities are well told, and no one can read the work for profit without gaining from it much that is entertaining and amusing. It is a book well calculated to win favor with the profession and the reading public.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Nov. 27, 1867.

DR. H. B. SANDS, PRESIDENT, in the Chair.

RETENTION OF URINE BY IMPACTED CALCULI IN URETHRA.

DR. CUTTER stated that, two weeks before, he had been summoned to Boonton, N. J., the messenger bringing the intelligence that the father of Dr. Farran, of that place, had been suffering from retention of urine for forty-eight hours. The patient was seventy-three years of age, and weighed nearly two hundred and fifty pounds. On arriving at the place, Dr. Farran informed him that he had succeeded in introducing the catheter as far as the bulbous portion of the urethra, but could not go beyond it. A large-sized catheter was then introduced, and likewise a smaller one, but the point referred to could not be passed. Going back again to the large catheter, and the fingers supporting the scrotum, a hard lump was detected at the seat of the obstruction. The instrument was then withdrawn and a dressing forceps introduced into the urethra, with a view of grasping the foreign body and removing it. As this could not be done, perineal section was proposed and performed, when the obstruction was found to be an impacted calculus. As the sound could not be passed beyond the obstruction, the stone was pressed forward, and was then cut upon and removed. The operation was attended with immediate relief, it only being necessary to use the catheter once after the operation.

The calculus, which was of small size, showed three facets upon its surface, which proved the existence of two others in the bladder. One of these had been detected in the bladder on the occasion of passing the catheter after the completion of the operation.

DR. MARKOE, in this connection, stated, that five weeks ago he had operated during his clinic upon a similar case in a boy six and a half years old. One year before he saw the patient; he came home from school complaining of an inability to pass his water. A physician was called, who succeeded with difficulty in introducing the catheter and drawing off the urine. This retention recurred from time to time, sometimes allowing but a little water to be passed voluntarily, at other times the stoppage being complete. This went on for a long time, the attending physician passing a catheter whenever the urgency of the symptoms demanded it.

On being brought to the clinic a steel sound was introduced, when an obstruction was discovered in precisely the same situation as in Dr. Cutter's patient; said obstruction proving to be dependent upon a calculus. The attention being then directed to the perineum, and a solid body being felt in the situation referred to, and it being of an oblong shape, the doctor ventured to predict that it was occasioned by a slate-pencil, more especially as it had lodged there so long, permitting an instrument to pass by it when the bladder had been relieved.

Perineal section was performed, and a rounded calculus was removed instead of a slate-pencil, as was anticipated. The elongated, hardened mass felt through the scrotum was found due to the deposit of fibrinous material in the long diameter of the tumor. The case afterwards progressed favorably, the patient having no more trouble in the passage of his urine.

In answer to a question from Dr. Van Buren, Dr. Cutter stated that in his case the prostate was slightly enlarged.

PROBABLE GUNSHOT WOUND OF STOMACH.

DR. CUTTER next exhibited a specimen, the history of which, he was sorry to say, was not complete. It was a small pistol ball, very much the shape of a Minié rifle ball, removed from a boy fifteen years of age, who was accidentally shot by his father five years ago. The missile entered the umbilical region over the centre of the large pouch of the stomach, and apparently passed directly through the organ and lodged in the back. As the case belonged to Dr. J. F. Ward, of Newark, who had attended the case for a very long period, he was unable to say whether there had been vomiting or purging of blood after the accident or not.

DR. HAMILTON thought it very unsafe to record such a case, with such an imperfect history as one of perforation of the stomach by a ball. He thought that it was necessary, in order to establish the existence of such a wound, to have vomiting of blood, or a discharge of it per rectum, or the existence of a fistula in the stomach itself, and the discharge of its contents through the wound.

Dr. Howard stated that he had met with several flesh wounds produced by pistol bullets at short range, and had invariably found that they had healed by first attention. He did not think it improbable that a wound might be made in the stomach and yet close with equal rapidity, leaving hardly a vestige of its course afterwards.

Dr. Sayre stated that he had only seen one case of *bona fide* gunshot wound of the stomach, and that was in the person of Beverly Cole, of California. In that instance there was vomiting and purging of blood, and a discharge of the contents of the stomach through the wound. It was three years since he had seen the case, and the patient was now doing well.

Dr. Hewit remarked that the case referred to by Dr. Sayre had been under his immediate care, being assisted by Dr. Valentine Mott, Jr., and Dr. C. S. Tripler, and that the symptoms were as Dr. Sayre had related them, except that there was no discharge of the contents of the stomach through the wound.

Dr. Sayre stated that he had merely reported the symptoms as they were detailed to him by the patient some time after the accident.

CANCEROUS TESTICLE.

Dr. Hewit presented a specimen of cancerous testicle, of which the following is a history:

On the 7th of the present month I was requested by Dr. Wright, of East New York, to see a case of suspected organic disease of the testicle, in the person of S. M. A. F. F. The following history was elicited:

The patient was forty-six years of age, a farmer and fisherman by turns, descended from a healthy and long-lived ancestry, born and raised in the immediate neighborhood, temperate, frugal, and chaste.

At the age of eleven he injured the right testicle in crossing a fence. Slight inflammation followed, and the groin remained from that time permanently enlarged, and sensibly harder than its fellow. No other noticeable circumstance was observed. At twenty-two years of age he married a healthy woman, and had a family of five children. Sixteen years ago he suffered an accidental bruise of the affected part, and it began to increase slowly in size and hardness, and to make its diseased condition manifest by occasional flashes of pain, and the irritation and inconvenience of its weight and bulk.

He continued, however, to pursue his occupations. The history from the time specified indicates progressive diminution (but not abolition) of sexual desire and power, and at a recent period the circumstance of acute pain in the act of emission. An examination revealed an elastic, symmetrical enlargement of the size of an ostrich egg, red, tender, and painful, with the sound testicle firmly compressed against the left external ring.

Diagnosis—Hydrocele, with malignant degeneration of the gland. Advice, extirpation.

Accordingly, on the 12th inst., I proceeded to the operation. Ether was cleverly administered by Mr. L. P. G. Gouley, and I punctured the sac and drew off about half a pint of serum. I was then enabled to examine the organ more carefully, with the result of confirming the view originally taken, and immediately proceeded with the ablation.

A Case of Traumatic Tetanus successfully treated by the Ordeal Bean of Calabar, is reported by Mr. A. Campbell, L.R.C.S., Edinburgh, in a recent number of the *Lancet*. One-eighth of a grain of extract was administered every half hour at first, and the result of relaxing the contracted muscles was soon obtained.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, December 2, 1867.

Dr. E. R. Peaslee, President, in the Chair.

REPEATED PRESCRIPTIONS.

The following preamble and resolutions, reported from the Comitia Minora, were adopted unanimously:

Whereas, The attention of this Society has been called to the repetition of prescriptions, containing active ingredients, by druggists, without the written order of physicians; and whereas serious consequences to patients are liable thus to ensue; therefore

Resolved, That we respectfully request the druggists of this city not to repeat such a prescription without the written order of the physician, he being the only competent judge of the propriety or necessity of such renewal.

Resolved, That a copy of these resolutions be sent to the druggists in this city.

MEDICAL INTELLIGENCE.

Among the topics embraced in the report of the Committee on Medical Intelligence were: Dr. Salisbury's article upon the discovery of a new algoid vegetation in chancroid; with Diday's view that all venereal diseases are of parasitic origin. The report of a committee of physicians at Florence, that syphilis cannot be communicated to animals; and the opposite conclusion maintained in a report lately presented to the Paris Society of Medicine. An account of the recent investigations concerning the period after menstruation during which conception is possible; of a new operation for relief of deafness, consisting in excision of the handle of the malleus, by the aid of the parabolic otoscope; and of the trial of acupressure in a case of subclavian aneurism.

HISTORY OF UTERINE PATHOLOGY.

Dr. T. G. Thomas read a paper upon the above subject, of which we give no abstract, as it will soon be published.

Dr. Peaslee said the Society was under deep obligation for the elaborate essay just read, and he hoped to see such papers presented more frequently. Our practice must be based upon our pathology; those discussions are most truly "practical" which give us comprehensive views of this; and for the attainment of such views historical investigation is essential. Though it is only within the last twenty-five years that uterine pathology can properly be said to have existed, yet it is surely of no slight import to know that the speculum was in use a century ago. He would allude to two or three points in the pathology and practice of the last twenty-five years. The lecturer had mentioned the prominent theories upon the subject, and he would refer especially to those of Bennett and Velpeau, who have exerted so powerful an influence in determining the present form of uterine pathology. The former maintained that the great majority (87 per cent.) of displacements are due to antecedent inflammation, the latter that in eighteen cases out of twenty the inflammation is caused by the displacement. Among adherents to the former, caustic is the great remedy, while Velpeau's disciples treat almost every case with some kind of mechanical support. Hence we had two, or he might say three, representative men in uterine practice: first, Bennett, with his caustic; second, Hodge, of Philadelphia, who pushed Velpeau's theory to its limit, and often used supporters (as he directly states) even where no displacement was found; and third, Sims, who, taking a different view still, that most uterine diseases depend upon some ob-

struction of the cervical canal, had given great prominence to operations upon the cervix. Doubtless each of these views required modification, though each had done much to advance true science. All innovators are apt to be extremists, yet we honor them none the less for their substantial additions to our knowledge. We think we have now learned the particular class of cases in which caustic is advisable, and we reserve it for such; while to mechanical support we assign its own province. Beyond question it will be the same with the view just now most fashionable, and the time will come when operations upon the cervix will be more rarely performed.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, Dec. 18, 1867.

DR. ALFRED C. POST, PRESIDENT, in the Chair.

ANNIVERSARY DISCOURSE.

DR. STEPHEN SMITH delivered the Anniversary Discourse, in which he gave a resumé of the condition of surgery in the metropolis, extending from a period of some two hundred years ago, to about the beginning of the present century. The discourse was interspersed with sketches and reminiscences of leading practitioners, among the most elaborate of which was a memoir of Dr. John Jones, Professor of Surgery in King's College, who died in 1791.

A copy of the discourse was requested, by a vote of the Academy, for publication.

The President announced that the Academy would be convened on the succeeding evening, to listen to a paper by Professor Horatio R. Storer, of Boston, Mass.

The Academy then adjourned.

NEW YORK MEDICO-LEGAL SOCIETY.

STATED MEETING, Nov. 5, 1867.

DR. T. C. FINNELL, PRESIDENT, in the Chair.

A CASE OF PERITONITIS, CAUSED BY LACERATION OF UTERUS BY SOUND.

DR. NEWMAN detailed the following case: A medical friend was summoned on Monday, Oct. 27th, to attend a woman four and a half months pregnant, who had been in labor thirty hours. She attributed her miscarriage to a fright got by collision with a boy on Broadway, and to a good deal of walking and excitement in Brooklyn. When he arrived, he found the external os dilated, the internal constricted, and the head of the fœtus presenting. On visiting her the following day at four o'clock, and finding no progress made, while the symptoms indicated increasing debility, he inserted Barnes's uterine dilator. But this proving ineffectual, he introduced a uterine sound, guided and protected by his index finger, with which he separated the membranes, first on one side, and then, after its withdrawal and reintroduction with the same care, on the other. By six o'clock of that same evening a dead fœtus was born. The placenta and membranes came away without difficulty; the former presenting to the eye the appearance of fatty degeneration. Immediately after this she was seized with a rigor, and the next day had the symptoms of violent peritonitis, which terminated fatally the following Saturday.

DR. BAHAN reported the result of the autopsy of the above case held the day following death. The abdominal cavity presented the appearances of recent, extensive, and violent peritonitis. The greater omentum was glued to the intestines beneath. A large quantity o sero-pus welled up from behind the uterus, which organ, as well as the liver, presented on its surface many patches of recent lymph. The uterine cavity contained some broken down clots of blood, and the external os was dark purple, and slightly ragged at one angle.

DR. FINNELL, in presenting the uterus of this woman to the Society, alluded at some length to its points of interest, whether viewed pathologically or medico-legally. But paramount over all was the existence of an abnormal canal, which starting from the cervix quite near the internal os, terminated very soon in a *cul de sac* in the uterine muscular wall. It was large enough to admit with ease the passage of the handle of a scalpel, and, in his opinion, was the result of an accident which had occurred to the gentleman in the introduction of the sound, notwithstanding the care and circumspection used.

DR. LYNCH doubted that a probe-pointed sound used in the careful and gentle manner described, could be made to penetrate the tissues of a uterus so healthy as this appeared to be.

DR. JOHN BEACH supposed the sound to have entered a sinus, from which slight force might push it into the uterine wall. He, however, doubted the relation of cause and effect between the wound and the peritonitis, as the uterine tissues presented no evidences of inflammation.

DR. CONNOLLY said it was a question whether this woman had not been tampered with by an abortionist previous to the regular physician's attendance, and agreed with the preceding speaker, that the relation between the wound and the peritonitis was not evident.

DR. WOOSTER BEACH said his experience at autopsies had taught him that inflammation might exist in a remote part of the peritoneum, and yet be due to injury of the uterus. He was not prepared to offer an explanation of this fact.

DR. STIRLING alluded to the woman's surroundings, which, taken in connection with the ragged condition of the external os uteri, led him to suppose that attempts had been made to induce a miscarriage, previous to the regular's attendance.

DR. NEWMAN closed the discussion by stating that the instrument used in this case was the uterine sound with a blunt end, about No. 7, catheter size. He called the attention of the Society to the fact that in the present contracted and shrivelled state of the parts the diameter of the wound is much larger than that of the sound. How much larger, then, it must have been in the fresh condition! He failed to discover any reasons for supposing it to have been made by a sound.

The meeting then adjourned.

N. Y. MEDICAL JOURNAL ASSOCIATION.

STATED REUNION, FRIDAY, NOVEMBER 29, 1867.

DR. GURDON BUCK, PRESIDENT, in the Chair.

PERIODICAL FEVERS.

DR. LEROY M. YALE read an elaborate resumé of the recent contributions to the literature of periodical fevers. Under their ætiology and pathology were given the views of Salisbury, with which our readers are doubtless familiar; of Robin, who attributes malarious fevers, as well as nearly all zymotic diseases, to the vitiation of the blood by a rapidly putrefactive, coagulable, albuminoid substance to be found in all miasmatic air (*Sur les Humeurs*, p. 195 et seq.); and of De Beaufort, who bases upon this theory a very ingenious pathology (*Bul-*

letin Générale de Thérapeutique, Sept. 30, 1867). Under prophylaxis and treatment, reference was made to the prophylactic power claimed for tobacco; to the new modes of administering quinia, hypodermically, iatroleptically, and by inhalation; and to new anti-periodics, among which chloroform stands preëminent in its power of bringing on reaction from pernicious congestions. M. Eulenberg's experiments upon the modus operandi of quinia were mentioned. He concludes, though the value of his results is questioned, that it directly destroys muscular irritability, and paralyzes first the reflex nervous centres of the cord, and later the cerebral ganglia.

The discussion which followed assumed a very practical character.

Dr. H. S. Hewitt stated that he had used quinia as a prophylactic in many hundred cases, and had come to regard it as almost infallible.

Dr. C. C. Lee fully endorsed this view. He referred to an instance in the late war, where a body of eight hundred and fifty men, not before exposed, were suddenly compelled to encamp in a malarious region; seven hundred of them were put under a prophylactic regimen of quinia, and of these but four or five were attacked by the fever; while of the one hundred and fifty not so treated, only twenty or thirty escaped it. It was observed in these cases that this agent was less efficient for the control of the disease, when once established, than for its prevention.

Dr. Austin Flint related a singular effect of large doses of quinia in a case of violent congestive intermittent, which he had seen last summer in consultation. During the paroxysm several doses of twenty to forty grains were given, at intervals of two hours, until upwards of one hundred grains had been taken with no evidence of cinchonism. When the amount of one hundred and thirty grains was reached, there suddenly occurred total blindness, but without tinnitus aurium or other of the usual signs of over action of the drug. The blindness passed off in a few hours, and the paroxysm, which had threatened to be fatal, was happily arrested.

Dr. White had treated a case in which ten grains of the sulphate produced convulsions, and the patient stated that he had been similarly affected before. The valerianate, in small doses, was substituted with good effect. Dr. W. had met with another instance of the kind. He said that the surgeons upon the Panama Railroad had given a long and faithful trial to the various substitutes for quinia, only to abandon them and return to the sulphate of this alkaloid as the best anti-periodic.

Dr. Garrish had been using, with encouraging results, the hyposulphite of soda (gr. x.–xx. ter in die) in four cases which had resisted quinine and arsenic.

NEW SPLINT FOR FRACTURE OF THE THIGH.

Dr. Hewit presented a new splint for fractures of the thigh. It is composed of metal; the side-pieces, which are firmly united by cross-bars, are hinged at the knee, and the thigh and leg portions are fixed at any desired angle by means of a simple screw appliance; extension is made from the foot by any of the usual methods (screw, elastic strap, or weight), counter-extension by a perinæal pad attached to the inner side of the splint, and by a pelvic band attached to the outer side; coapting pads, shaped to fit the thigh, are fixed at any point by screw clamps which play along fenestræ in the side-pieces. The thigh is to be left without bandaging. Dr. H. claims for this splint the merits of simplicity, lightness, and firmness; openness, giving free ventilation to the limb, and enabling the surgeon to detect at once any deviation of the fragments from the right line; and, as its most important feature, that it secures such perfect coäptation as to reduce to the minimum the force of extension and counter-extension required.

Annual Meeting, Tuesday, December 3, 1867.

Dr. Stephen Smith, Vice-President, in the Chair.

REPORTS.

The report of the Treasurer, Dr. S. T. Hubbard, showed the total receipts for the year to have been $1634.32; total expenses, $2010.28; but by offsetting the bills against the Association by the amount due it, there was left a nominal debt of $29.68. The Treasurer stated that the expense of furnishing the new rooms had made an extra draft upon the funds, during the past year, such as would not soon be required again; and that in his opinion the current regular assessments would be ample to meet all demands upon the treasury.

The Board of Direction reported the condition of the Association very flourishing. A reserved fund had been guaranteed, to meet any deficit in its finances, but there had been no occasion to draw upon it. The society was larger than the year before, numbering at present about 160 members. Four members had died during the year: Drs. S. P. White, C. E. Morgan, J. B. McEwen, and Robert Watts. The library was steadily increasing in value.

The Librarian, Dr. B. S. Thompson, reported that at the beginning of the year the list of medical periodicals regularly taken embraced thirteen American, eight English, twelve German, and ten French journals. During the year eight journals had been added, making the number now received fifty-one. Donations had been received of one hundred and twenty-eight copies of transactions, monographs, journals, etc.; also of several photographs and engravings.

OFFICERS ELECT.

The Association proceeded to ballot for officers for the year. Dr. Stephen Smith declined to be a candidate for reëlection as Vice-President, from inability to be regularly present at the meetings, and Dr. Hubbard declined further service as Treasurer. With these exceptions the old Board was reëlected. The following are the officers chosen: President, Dr. Gurdon Buck; First Vice-President, Dr. Isaac E. Taylor; Second Vice-President, Dr. Samuel T. Hubbard; Recording Secretary, Dr. F. A. Burrall; Corresponding Secretary, Dr. Emil Noeggerath; Treasurer, Dr. H. P. Farnham; Trustees, to serve three years, Drs. F. H. Hamilton, F. J. Bumstead, Austin Flint, Sen., Alfred Underhill, and A. B. Mott.

EAST RIVER MEDICAL ASSOCIATION.

Stated Meeting, Nov. 5th, 1867.

Dr. V. Morse, President, in the Chair.

A CASE OF TWIN-DELIVERY, WITH INTERVAL OF SIXTEEN HOURS.

Dr. O'Sullivan read the history of an interesting case of twin-delivery, which occurred in his own practice; in which there had been an interval of sixteen hours between the birth of the first and second child. The point of interest was that after the birth of the first child, the uterus remained perfectly inactive. Hour after hour passed away, until at last it was determined to wait no longer. Fearing to give ergot, lest the presentation should prove to be an abnormal one, Dr. O'Sullivan thought seriously of delivery by version.

On introducing the hand into the vagina, for the purpose of making a thorough exploration, he found the pelvis ample—the head of the fœtus rather large, but not too much so for the lateral diameters, and presenting in the left occipito-iliac-posterior position.

The membranes were ruptured, when a few feeble pains followed, but soon ceased. Ergot was then given in the ordinary manner, with the desired result; the pains, from having been at first moderate, soon became satisfactorily powerful. The head readily engaged, the occiput rotating posteriorly, and passing though the hollow of the sacrum, and a male child of large size, strong and healthy, was delivered. The placenta was readily detached without any hæmorrhage. The patient made a good getting up. The interesting point in this case was in reference mainly to the long interval of time which had elapsed before the birth of the second child, it being, with some rare exceptions, probably the longest on record, in which the result to both mother and child was so favorable. It is probable that the propriety of non-interference in this case, until the uterus resumed its action, may be open to criticism, notwithstanding that no untoward symptoms of any kind ensued during the interval. With now nearly ten years additional experience in obstetric practice, and considerable in the use of the forceps, he would not now delay so long before attempting delivery; he would not wait at furthest until a single hour had elapsed. If it were a vertex presentation, and had engaged sufficiently, he would use the forceps; if this were not feasible, he should then turn and deliver. Either of the above expedients he deemed preferable to the use of ergot. There is, however, very respectable authority for postponing interference in these cases unless compelled to the contrary by accidental circumstances, such as convulsions, hæmorrhage, etc. There are several instances on record, though of course very rare, when the second child has been retained for days and even weeks.

Dr. Abbott asked why the doctor preferred using forceps in such cases to administering ergot. This question gave rise to an animated discussion, which continued until a late hour, when it was finally resolved to make "Parturients" the subject for debate at the next meeting.

Correspondence.

MEDICAL MATTERS IN PARIS.

(FROM OUR SPECIAL CORRESPONDENT.)

To the Editor of the Medical Record.

CURIOUS NERVOUS PHENOMENA.

Sir—The "sensation" of the week centres around the discussion of a remarkable circumstance occurring in the wards of M. Richet at Hotel Dieu. On the 23d of October, a woman entered the service, who, falling against some pieces of sheet copper, had been wounded in the forearm by their sharp edge, in such a manner that the radial artery and median nerve had been completely divided. Notwithstanding this section, sensibility remained in the thumb, index and middle fingers, and the external border of the ring finger, all furnished by the median nerve; moreover, the peripheric extremity of this nerve was exquisitely sensitive to the touch of the pincers.

The fact has been examined and acknowledged by a number of distinguished physicians. There can be no doubt that the median was completely severed. But it is difficult to explain a phenomenon so contrary to the facts which form the basis of current physiological theories, according to which the peripheric extremity of a severed motor nerve preserves its motor power, and that of a sensitive nerve loses its sensibility. Dr Fort, in the Union Médicale, endeavors to prove that the case is one of *recurrent* sensibility, like that described by Bernard as existing in the facial nerve. Irritation of this nerve excites pain, on account of its anastomoses with the trigeminus. In the same way, says Dr. Fort, we must infer from this fact itself that the radial and cubital nerves furnish anastomoses with the median, by which this latter is enabled to preserve its sensibility even after section.

This argument s rather *post factum*. Moreover, as observed by Dr. Reveillant in the *Gazette des Hôpitaux*, there is no analogy between the coupling of a sensitive and motor nerve in a single "nervous pair" (as in the case of the 5th and the 7th) and this supposed anastomosis between two sensitive nerves, which is justified by no precedent whatever. Dr. Reveillant maintains, that since the grand palmar nerve is more deeply situated than the median at the wrist on the level of the wound, since it is united to the median only by a loose cellular tissue which permits great mobility, since the median was torn, instead of being distinctly cut, and the wound was deepest on the radial border of the wrist—in view of these considerations it is probable that the great palmar nerve was not divided, as at first supposed, and the recurrent sensibility was due to its presence in the parts furnished by the median. But this explanation, though hypothetically satisfactory for the sensibility remaining in the hand, renders no account of that preserved in the peripheric extremity of the median, since the palmar branch is given off from this latter nerve at a point above the situation of the wound, and afterward has no connection with the median. Dr. Richet has not yet spoken. His detailed description of the case is presently expected, and may throw light on this vexed question.

EXPERIMENTS UPON CRIMINALS.

At the naval medical school of Brest, M. le professeur Duval has pursued some physiological researches in a direction that continually tends to become restricted. If the humanitarian tendencies of the age prevail, capital punishment will be abolished, and physiologists for ever deprived of the bodies of criminals as material for experiments. In view of this unfortunate contingency, all experiments actually performed are invested with a double interest, on account of the possibility that they may be the last permitted in civilized countries.

The following is a *résumé* of the results obtained by M. Duval, in galvanization of the different apparatus of the bodies of criminals, within five or six minutes after their execution.

Nervous System.—Galvanization of the motor ocular nerve, at its point of immersion in the cavernous sinus, caused instant contraction of the dilated pupil. In two subjects reflex movements were excited by a brusque tap on the hands or feet. The contractions of the deltoid, brachial, biceps, anterior tibial and gastro-nervous muscles were especially evident. In the case of a slight irritation of the surface, exciting contraction of the subjacent muscles, the action was evidently reflex: where a smart percussion had been practised, M. Duval supposes that the muscular fibre had been directly excited, independent of the nerves. This experiment confirms Schiff's refutation of the theory that warm-blooded animals could not exhibit reflex movements after decapitation.

Digestive Apparatus.—The stomach and small intestines

continued to exhibit peristaltic movements for several minutes. The stomach was filled with food, and in the midst of digestion, but none of its contents escaped at the orifices after removal of the organ from the abdomen, so efficient was the contraction of the sphincters. A remarkable prominence of the solitary closed follicles of the ilium was observed. This fact is interesting, on account of a theory recently proposed, which considers such prominence to be a characteristic lesion of cholera.

Circulatory Apparatus.—The primitive carotids were divided, and their extremities were seen to rise at regular intervals, elongate beyond the level of the wound, and then subside; at each impulse a small quantity of frothy vermilion blood escaped.

On the same two subjects, the thorax was opened seven minutes after death, and the heart found to be beating within the pericardium. Upon incision of this membrane, the following succession of phenomena was observed. At the beginning of each movement the auricular appendix was suddenly raised, and distanced from the aorta, then fell as abruptly into its primitive position. In rising, the appendix lengthened, and the indentures of the circumferencese parated like the fingers of an outstretched hand. At the same time with this erection of the appendix, occurred an *expansion* of the auricle, as if it were distended by an efflux of liquid. The contraction of the ventricules followed that of the auricles in less than the fifth of a second. These cavities were shortened in all their diameters, their surface became furrowed, they contracted together in perfect synchronism.

After cessation of the spontaneous beatings of the heart, the movements were renewed by the application of galvanism, first to the organ itself, afterward to the spinal cord.

M. Duval found that a moderate degree of contractility existed in the walls of the aorta, which, irritated by the insertion of a finger, were found to slightly press upon it.

Respiratory Apparatus.—Upon galvanization of the external or internal intercostal muscles, or of both together, the under rib was raised and pushed outward. M. Duval concludes that both these muscles, concerning which, from the time of Haller and Hamberger, there has been so much discussion, are inspiratory. M. Duchenne (de Boulogne) impresses this fact into his service to prove the same theory.

ATROPHY OF MUSCLES OF TRUNK AND LIMBS.

I am not sure whether I have mentioned the lecture delivered by Duchenne upon a patient in the wards of M. Bouillaud, affected with atrophy of nearly all the external muscles of the trunk and limbs. The intercostal muscles were entirely wasted, and the chest is flattened in a remarkable manner. The respiration is performed by the diaphragm. M. Duchenne remarked, that since the thorax contracted, as in expiration, as soon as the intercostal muscles became powerless, it was just to infer that in health they antagonized this contraction; that is, opposed the action of the expiratory muscles. It seems to me evident, however, that the case in question proved that they exerted such antagonism in virtue of their *tonicity*, not at all on account of the intermittent contraction during inspiration. The experiments of M. Duval are no more conclusive, for although a muscular fibre when galvanized should elevate a rib to which its fibres were attached, we are not thence to infer that it contracts habitually during life, or therefore that it directly elevates the ribs during inspiration.

P. C. M.

CONTRACTIONS OF THE MUSCULAR COATS OF THE STOMACH IN VOMITING.

To the Editor of the Medical Record.

Sir—In a recent review (Medical Record, *Dec.* 2, 1867) of *the "Physiology of Man," vol. ii.*, by Austin Flint, Jr., M.D., "we learn," says the writer, "that the diaphragm is the principal agent in vomiting, that this muscle is aided by the abdominal muscles, *the muscular coats of the stomach being at the time relaxed.*"

We present the following facts, not only as a contribution to physiological science, but as our reasons for differing largely from the views entertained by the distinguished author on the subject in question.

On the 23d of April, 1858, at Lock, Berlin, Wayne Co., New York, while performing the operation of ovariotomy, which proved successful, the incision extending from the ensiform cartilage to the pubes, and after the removal of two large tumors weighing nearly forty pounds, my patient began to vomit.

Desiring to settle for myself the physiological question whether the muscular coats of the stomach are mechanical agents in vomiting, I introduced my hand into the abdomen, and placed it upon the stomach. That organ *felt and acted like a living thing, its coats were not relaxed, but contracted under my hand* at each of three consecutive retchings, during which a large quantity of food was ejected. The frequency of gastrotomy renders it probable that other observers may confirm my experience, and we may thus establish a fact of value to science and of interest to scientific men.

Very respectfully,
Your obedient servant,
Hazard C. Potter, M.D.

Geneva, December, 1867.

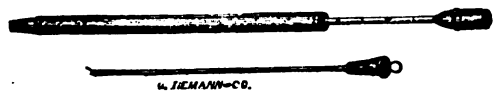
New Instruments.

A POCKET-CASE HYPODERMIC SYRINGE.

By D. M. STIMSON, M.D.

The accompanying cut represents a convenient form of hypodermic syringe to be carried in the pocket-case.

The idea which is here carried out was suggested to me two years ago by Dr. G. H. Wynkoop, of this city.



The point, inclosing the wire cleaner, fits into a hollow graduated piston. The barrel is an ordinary silver tube, the size of a No. 10 catheter, and is about three inches long.

New Publications.

Books and Pamphlets received.

A Practical Treatise on Diseases of Children. By D. Francis Condie, M.D., Fellow of the College of Physicians, etc. 6th Edition. Revised and enlarged. Philadelphia: H. C. Lea. 1868.

Observations on the Nature and Treatment of Polypus of the Ear. By Edward E. Clarke, M.D., Professor of Materia Medica in Howard University, etc., etc. Pp. 71.

42nd Annual Report of the Mass. Charitable Eye and Ear Infirmary. For the Year ending Sept. 30th, 1867. Boston. 1867.

On the Signs and Diseases of Pregnancy. By Thomas Hawkes Tanner, M.D., F.L.S., etc. From Second and Enlarged London Edition. Philadelphia, H. C. Lea. 1868.

Medical Items and News.

Dr. Livingstone probably Alive.—Letters received in London give assurance of the safety of Dr. Livingstone, the African explorer, who was reported to have been killed by the natives. In April last he was in good health and continuing his explorations.

Eulogy on Prof. Valentine Mott.—Prof. Samuel D. Gross, of Philadelphia, Pa., pronounced a Eulogy on the Life and Character of the late Prof. Valentine Mott, at the Bellevue Hospital Medical College, Dec. 14, 1867. The travels of the eminent deceased, his intercourse with the distinguished medical and surgical savants in Europe, as well as other incidents in his eventful career, were fully discussed.

Dr. Vernois, Physician of the Hotel Dieu, has resigned his position.

Dr. Barrey.—We regret to announce the death of Dr. Barrey, Medical Director of the Insane Asylum at Rodez. He died on the 1st of October, after a short and painful illness, in the 51st year of his age.

Suicide of a Distinguished Surgeon.—Dr. Ludwig Lewinsky, head of one of the surgical divisions of the General Hospital at Vienna, was found dead in his quarters, on the 17th of October. A farewell letter, addressed to his wife, leaves no doubt of his death being the result of his own deliberate action. He had been for some months haunted with the fear of becoming insane, a fear which received some substantial basis in the fact of his being afflicted, during this period, with occasional fits of *insomnia*.

An autopsy, conducted by the celebrated Rokitansky, discovered unquestionable evidences of poisoning by cyanide of potassium. There was also found an abnormal thickening of the membranes of the brain, sufficient to account for the sleeplessness referred to, which in the end had led to so melancholy a result.

Trichinasis and its effects upon an Unbeliever.—At a recent public meeting, while Professor Virchow was urging upon the audience the necessity of microscopical examinations of all meats supposed to be infected with trichina, a distinguished veterinarian arose and astonished every one present with the announcement that the existence of trichinasis was an unfounded illusion. Considerable sensation was of course produced in consequence, when one of the gentlemen present challenged the horse-doctor to eat a portion of the meat which was said to contain those creatures. The challenge was caught up by the assemblage, and amid the greatest enthusiasm, the valiant opposer of science was forced to partake, immediately after which he left the room. A few days after the veterinarian was helplessly paralyzed in his bed, and was willing to acknowledge his error.

Surgical Instruments from Pompeii.—M. Scoutettin has, by permission of the Italian Government, obtained photographic representations of the different surgical instruments found at Herculaneum and at Pompeii. There are more than three hundred of these instruments, but only about sixty of dissimilar kinds. Among the most interesting are some brass catheters, similar to those described by Galen, the curves of which are better than many of the sounds and catheters made at the present day, and a probe presented by Galen to a magistrate named Erastitrate, and which seems preferable, in a practical point of view, to those now in use.

Medical Statistics of the U. S. Navy.—From the report of the Hon. Gideon Welles, Secretary of the Navy (Dec. 2. 1867), we extract the following:

The Chief of the Bureau of Medicine and Surgery presents not only the usual report of sickness and death in the navy during the year, but gives in addition interesting tables showing the number of sick of each squadron engaged on the blockade during the war, together with the total of each disease treated, number of deaths on the blockade during the rebellion, proportion of deaths to the number of cases treated, and the proportion of deaths to the number of ship's company. The summary shows that from the commencement of the rebellion to the 30th of June, 1865, there were under treatment 114,038 cases; that there were 2,532 deaths, the proportion of deaths to the number of cases treated being ·0175. At the close of the year 1865 there remained under treatment 853 cases; during the year 1866 there occurred 24,350 cases of disease, injury, etc., making a total of 25,203 cases treated during the year, of which 310 died; 23,954 were returned to duty or discharged the service, leaving 939 cases under treatment at the end of the year 1866. The proportion of cases admitted to the whole number of persons in the service was about 1·46, or each person was on the sick list $1\frac{1}{46}$ times during the year. The proportion of deaths to the whole number in service was ·018; and the percentage of deaths to the whole number of cases treated is ·012, or less than two per cent., taking the average strength of the navy—officers, seamen, marines, engineer service and coast survey included—for the year 1866, to be 17,193. The total number of deaths from all causes, reported at the Navy Department from October 1, 1866, to September 30, 1867, is 395. The number of insane of the navy under treatment in the government asylum near Washington, during the year ending 30th September, 1867, was 24; number now under treatment, 18. The necessity for enlarging the laboratory accommodation continues to press itself upon the attention of the bureau, and estimates for this purpose have again been submitted.

Dr. Dixi Crosby, LL.D., who succeeded the late Dr. Mussey in the professorship of surgery in the Dartmouth Medical School in 1838, proposes to retire from active connection with the school this year. He will then have completed his thirtieth course of lectures. Dr. Crosby is the only member of the medical faculty of 1838 now retaining position in the institution. Dr. Oliver W. Holmes was then professor of anatomy and physiology, and the Hon. Joel Parker, LL.D., of medical jurisprudence.

M. Gosselin, Professor of Clinical Surgery (at La Pitié), has been appointed Professor of Clinical Surgery in La Charité.

New Hospital.—The city of Rochester, in this State, has a new hospital which is evidently a credit to the country. It is complete in all its arrangements, as we judge from the account of it in "*The Hospital Review*, a journal devoted to the interests of the sick and suffering at the Rochester City Hospital." There is a surgical, medical, lying-in, and eye and ear department; attending physicians, H. W. Dean, M.D., U. U. Ely, M.D., David Little, M.D.; surgeons, H. F. Montgomary, M.D., H. H. Langworthy, M.D., John F. Whitbeck, M.D.; ophthalmic and aural surgeon, Charles E. Rider, M.D.

Population of France.—At the close of a late discussion in the French Academy, on the growth of the population, it seems conceded that while the population is increasing sensibly, the rate is gradually diminishing.

New Orleans an Infected Port.—A recent proclamation of the Metropolitan Board of Health has made New Orleans "an infected place within the meaning of the Health Laws of this place." Appropriate quaran-

tine regulations are enjoined in respect to persons and vessels coming from thence, cholera still existing there, which are to continue in force until the 21st day of February of the ensuing year, at noon.

THE QUESTION OF RANK.—The chiefs of the Bureaux of Medicine and Surgery, of Provisions and Clothing, and of Steam Engineering, bring to the notice of the department the claims of their respective corps to increased rank. It is urged that by the recent creation of the several grades of admiral, of commodore, and lieutenant commander, the rank of the staff corps has, in effect, been reduced. The law now provides for the appointment of fleet surgeons, fleet paymasters, and fleet engineers, but the rank is only temporary, ceasing when the officer is detached from fleet duty. If these grades were made permanent and to embrace a sufficient number for the service required of the officers standing at the head of their respective lists, and the rank now temporarily given to fleet officers and to the other grades legalized, it is thought that the staff corps would be generally satisfied. It is understood that they propose to bring the matter of increased rank to the notice of Congress, and such legislation as may seem equitable and just is recommended.

PREVENTING RAILROAD COLLISIONS.—A correspondent of the *Mechanics' Magazine* proposes a plan whereby every train on a track shall communicate with another, before or behind it, whenever the two approach within a certain distance. Electricity is the means employed, the engines of the trains carrying batteries one wire from which connects with the engine bell, the other connecting with the earth. Light insulated supplemental rails, made in continuous length of two miles each, are laid by the side of the main rail, so that the tire of the locomotive wheel runs on both. As long as two trains are not at the same time on one length of conducting rail, no electric current can pass on account of the break joint, but as soon as they come within this particular distance of each other the circuit is completed and both bells will ring.—*Scientific American.*

N. Y. MEDICAL JOURNAL ASSOCIATION.—The weekly Friday evening reunions of this Association were resumed on the 8th of November. They are fully attended, and are occasions of no little scientific and social interest. At each meeting is presented a resumé of the current literature of some special subject, prepared from the ample resources on the Society's shelves, by a member previously appointed. Original papers are frequently read, and new instruments or other matters of professional interest brought to the notice of the meeting. After discussion of the subjects presented, the Society adjourns to coffee and sandwiches, and the remainder of the evening is devoted to social converse. We shall furnish our readers reports of such papers and discussions as may be of special interest.

BLOOD IN THE BODY.—The amount of blood in an adult is nearly thirty pounds, or full one-fifth of the entire weight. The heart is six inches in length and four inches in diameter, and beats seventy times per minute, 4,200 times per hour, 100,800 times per day, 36,772,000 times per year, 2,565,440,000 in three-score and ten, and at each beat two and a half ounces of blood are thrown out of it, one hundred and seventy-five ounces per minute, six hundred and fifty-six pounds per hour, seven hundred and three-fourth tons per day. All the blood in the body passes through the heart every three minutes.—*St. Louis Medical Reporter.*

TOBACCO AND PICKLES.—If Englishmen have had exaggerated ideas about the tendency towards rotundity exhibited by all Dutchmen, they have by no means overrated the national habit of smoking. The Dutchman of to-day is as great a smoker as was his great-great-grandfather. The pipe has, however, given way to the cigar; and the meanest laborer indulges himself, often when at work, with the "weed" which costs him less than a farthing. Passengers on railways smoke as a matter of course; and the guard, as he passes from carriage to carriage to examine the tickets, does not hesitate to rest now and again in one of the carriages to smoke a cigar with any neighbor or acquaintance. The teeth of a Dutchman are nearly as characteristic as the skin of an Englishman who has lived for a long time in India; they are much discolored, and many of the incisors are carious. The Odontological Society will find the best specimens of discolored teeth from smoking among modern Dutchmen. The Dutchman's partiality for pickles is peculiar, yet easily explained. In Rotterdam, but more largely in Amsterdam, pickle-stalls are not much less frequent than apple-stalls in London. The pickle-stall seems to be, with many workmen, the half-way house between the workshop and the dining-room. This nation of confirmed smokers abounds in dyspeptics; and the poorer classes give their clammed palates a fillip occasionally with the sour and acid substances sold in the streets.—*British Med. Jour.*

WEIGHT OF THE HUMAN BRAIN.—In the *Archiv für Anthropologie*, Dr. A. WEISBACK has been giving several articles on the relative weight of the brains of the populations of the Austrian empire, in respect to the bodily size, age, sex, and diseases. Some of his conclusions are as follows: "Among Germans twenty years of age, those of medium height have the largest brains. With increasing size the cerebellum increases, while the cerebrum relatively decreases. In chronic sickness the total weight of the brain decreases, but the decrease is confined to the cerebrum and the pons, the cerebellum relatively increasing. The total weight of the brain, and the actual weight of the cerebrum, are greatest at about the age of thirty, from which period both steadily decrease until, at the age of eighty, ten per cent. is lost. The pons varolii increases to the fiftieth year, and then steadily decreases, sometimes seventeen per cent. in a decade. On the whole the female brain is smaller than the male, but in certain races this difference is confined to the posterior, in others to the anterior segment."

OUR BLACK DESCENDANTS.—At a meeting of anthropologists, which had also an international character, at Paris lately, M. Quatrefages, one of the most eminent French *savans*, raised the question whether the first inhabitants of Europe were white or black. M. Quatrefages thinks that the whites preceded everywhere the negroes, who descend from them. The principal argument which he invokes in favor of that opinion is the following. All travellers who have lived in countries where only the negro race dwelt have remarked that sometimes children were born of paler color, less distant from the white type. This, says M. Quatrefages, is to be explained by the influence of white ancestors, whose type reappears exceptionally amongst their negro descendants. This reappearance of the ancestral type is what is called atavism; "and, as black children are never found amongst the white races, it must be inferred that, if the negroes descend from the whites, the whites do not descend from the negroes."—*British Medical Journal.*

Original Communications.

EXTIRPATION OF A UTERINE TUMOR.

By G. P. HACKENBERG, M.D.,

HUDSON, N. Y.

About a year ago, I presented to the New York Pathological Society a large abdominal tumor I removed from a Southern lady, then residing in the city of New York. The tumor had been diagnosticated as ovarian, but after its removal it was ascertained that it was uterine. As a similar case has occurred in the practice of Dr. E. Krackowizer, recently published in the MEDICAL RECORD, I have thought that a history of the case under my management might not only prove interesting, but perhaps tend to put us more on our guard in making out the diagnosis of abdominal tumors.

The patient I operated upon was forty-five years of age. She was a maiden lady, and always enjoyed a good degree of general health; never was troubled with any menstrual irregularities, and never suffered much from immediate uterine disturbances, or even through their sympathetic influences. Three years previous to the time of the operation, her general health, from unknown causes, received a shock, from which she never fairly rallied. She, however, continued to perform the duties of her vocation, which was that of teaching. About a year later she detected an abdominal enlargement, which gradually increased until it had assumed an enormous size. The enlargement at first occasioned no special inconvenience, but as the tumor increased in size, exhaustion and dyspnœa set in, and the patient became extremely anxious for surgical aid. She was a lady of rare intelligence, and expressed a positiveness that the tumor originated within the left ovarian region.

My first examination was about a month before the operation, having only seen her twice during that time, and she then informed me that she had been examined by Professor Eve, and other surgeons of the South, and that they had diagnosed her case ovarian tumor, and recommended an operation. On account of the increase of dyspnœa as the tumor enlarged, the patient was extremely anxious for an operation, and for that purpose came to New York. Owing to the positiveness of the patient, and the case being diagnosed by some of the most distinguished surgeons of the South, I must confess I was not strictly critical in making out a distinct and unbiassed diagnosis of my own; however, I doubted the serous character of the enlargement. I saw her again on the day of the operation, and she was again examined by Dr. T. H. Hammond, now of St. Louis, and Drs. John Beach, Hyslop, Wohlforth, and others from the city of New York. They likewise considered the case ovarian tumor, and saw no objection to an operation. The tumor was of an enormous size, and weighing probably, in situ, not less than twenty-five pounds, and occupied almost the entire pelvic cavity, and anterior part of the abdomen. To the touch it was smooth and elastic, and painless even by rude manipulations. It appeared to be movable to a limited degree. On making an examination, as it was expected, the tumor had forced itself into the cul-de-sac of the vagina, crowding the uterus against the sacrum. The os was under the manipulating control of the index finger, and was overhung by the broad base of the tumor.

The uterine sound was not resorted to, in making out our diagnosis, for the following reasons: 1st. The patient had determined upon running the risk of an operation, and objected to the use of the sound. 2d. We did not deem the use of the instrument absolutely necessary, as the removal of the tumor became imperative, regardless of its character, whether uterine or ovarian. 3d. Owing to its large size, its great pressure on the uterus, its supposed long pedicle, we did not think that the sound would serve us to make out a clear case.

Our omission in using this valuable instrument, therefore, gives us not much regret. Even in the hands of such skilful and experienced surgeons as Krackowizer and Kammerer it has deceived them in rendering a correct diagnosis in their case of uterine tumor.

After the patient had taken the risk of the operation fully into consideration, and still decided in its favor, we carefully prepared her for it. Before she was taken to the operating table, an ounce of brandy was given. As she lay down to receive the chloroform she felt somewhat the influence of the spirits. As soon as she was under the influence of the anæsthetic an incision was made to the extent of about six inches, between the umbilicus and symphysis pubis. With rapid dissection the tumor was exposed.

I must state that at the examination of the tumor I was not positive, as were my assistants, that we had fluctuation, and expressed the idea that we might be deceived by the superabundance of adipose tissue connected with the walls of the abdomen. In my own mind the differential diagnosis of the case was between a fibrous uterine and fibrous ovarian tumor; declining, however, to favor the latter. Even if uterine, I considered the operation not necessarily fatal, and therefore not contra-indicated. Dr. J. D. B. Stillman, member of the New York Pathological Society, published in the New York Journal of Medicine Dr. Herff's case of fibrous tumor of the uterus, which he successfully removed by abdominal section. The case had been diagnosed ovarian tumor. The patient permanently recovered. Dr. Atlee, of Philadelphia, performed the operation twice with success.

After the tumor was exposed, it was found that the omentum was adherent over part of its upper anterior surface. These adhesions were gently broken away. Such was the size of the tumor and consequently the pressure from within, that it was impossible to make out the relation the pedicle held with the uterus or the ovaries. A trocar was thrust into the tumor, and instead of serum presenting itself through the canula, we had venous blood, with a tendency to flow freely. I therefore quickly removed the trocar and firmly plugged up the bleeding orifice with lint, and checked the hæmorrhage. A solid tumor had now revealed itself. On the surface, it was freely supplied with veins; many of them were large and well distended. The crisis of the operation was now presented, and for a moment was critical in the extreme. The question was not whether to desist, for the size of the tumor, the great pressure from within, on a now tense gaping wound, made it impossible. Therefore I quickly extended the abdominal section upward, within a few inches of the ensiform cartilage; so as to enable me to dislodge it from its bed. The extirpation was then only accomplished by hunting out the smallest end of the mass, and bringing it out first; so as to have the body of the tumor to follow like a wedge. As the growth was supported by two assistants, I carried the chain of the écraseur around the pedicle, and proceeded quickly to make a deep indentation into it, for the purpose of applying a strong ligature. I say this was done quickly, in order to economize blood by cutting short instantaneously the circulation of the tumor. After the ligature was thus applied, the chain of the écraseur was

carried toward its base, and promptly removed. No hæmorrhage followed. The operation was performed in thirty minutes.

After the wound was carefully cleansed, and all oozing of blood discontinued, we closed it by silver sutures, one of them holding the extreme end of the stump.

As the patient emerged from the influence of chloroform the sutures were introduced. Brandy and half a grain of acetate of morphine were administered after the operation; and the patient gradually passed into a favorable reaction. The operation was performed at 11 o'clock, A.M., and when I saw her in the evening she was in a tolerably comfortable condition; the next day symptoms of peritonitis set in, accompanied with constitutional depression. With the abdominal soreness, the pulse was small and very quick; the tongue dry and coated with fresh sordes. She was remarkably quiet. There was considerable serous oozing from the wound; but not much blood. The symptoms of peritonitis increased in spite of the remedies we brought to bear against them, until the morning of the third day, when the extreme depression terminated in death. No post-mortem examination was permitted.

In examining further into some of the symptoms of this remarkable case, it appears to me now that we can trace in a measure their true character.

That the menstrual function was not impaired was quite significant, if not pathognomonic in the case. Ovaries being free of disease, with good systemic blood, usually perform their function uninterruptedly; but where one or both are diseased they show menstrual trouble. Even where but one is affected, the other through sympathy refuses to perform its office; and their disease always manifests manifold sympathetic troubles. Uterine degeneration, partly under revulsive influences, but more owing to a deterioration of the blood, will likewise suspend the healthy action of the ovaries; but no ex-uterine growth will have the same effect, as long as the blood is left with its normal standard of fibre. Therefore the insidious manner in which the disease developed itself, and the little disturbance it caused to the general system, even after the tumor had grown to a considerable size, should have excited our suspicion, that the disease was neither ovarian nor a malignant degeneration of the uterus. In either case the symptoms would have been more ative.

The tumor was movable, or rather floating, as uterine tumors usually are. In Dr. Krackowizer's case the mobility of the tumor was in such a degree, that in the examination of the case there was no agreement from which side it originated. This feature alone should awaken suspicion that the tumor was of central origin.

As a means to make out our diagnosis in this disease, the use of the uterine sound is not to be neglected; but without corroborating symptoms to sustain us, what in our hands it might reveal should be received with a cautious consideration.

The examination, per rectum, is of the greatest importance, as the relative position of morbid growth, within the base of the pelvic cavity, with the uterine organs can be accurately ascertained.

In uterine tumors, the developing symptoms are peculiar. They are the play of physiology more than pathology; being somewhat akin to those of gestation. They manifest themselves not only by characteristic sensations, but leave more or less a print on the os, tincæ, the mammary gland, the stomach, and the urinary secretions. In uterine tumor the mammary glands are well developed; in ovarian tumor the tendency is to atrophy of these organs.

In uterine tumor there is not the tendency of the body to waste, and the development of cachexia that there is in ovarian tumors and malignant degeneration of the uterus. Some time after the first stages of the disease have passed over, for a period of several months, there is a tendency to obesity. This was the case with my patient.

In the advanced stage of the disease, the pain is likewise characteristic. It is like bearing a heavy weight, paroxysmally manifesting itself in catching, quickening sensations. It is like an ill-defined quickening sensation, common in gestation. The pain in the back is likewise more troublesome in this disease than in ovarian tumor.

In uterine tumor the uterus is more or less in an unusually developed state, with its sensibility exalted. Therefore in menstruation there is more or less either dysmenorrhœa or menorrhagia, if not both. This is not owing to any morbid condition of the ovaries, but simply to the increased sensibility of the uterus, and may be so slight as even to pass the special notice of the patient, her mind being so intently occupied with the main disease. The developed condition of the uterus can but be detected by way of the rectum.

Although dyspnœa may be considerable in all excessive growths of abdominal tumors, in ovarian tumors this symptom is particularly troublesome. There is even a marked difference in this symptom between fibrous and serous tumors of the same kind, the latter causing more difficult respiration than the former. These differences are owing to the more rapid enlargement taking place in the liquid tumors than those that are solid. And paroxysmal dyspnœa may be accounted for, by the sudden changes in the pressure on the diaphragm, caused either by gaseous or fæcal accumulations within certain portions of the alimentary canal.

THE PATHOLOGY OF THE URINARY ORGANS AND OF THEIR SECRETION.

BEING A REPORT READ BEFORE THE

NEW YORK MEDICAL JOURNAL ASSOCIATION, DEC. 13, 1867.

By W. B. LEWIS, M.D.

The first department of our extensive subject is illustrated by a number of cases collected from various sources. After these are presented such recent observations, as were deemed of interest or importance, upon the symptoms and treatment of those diseases of which a morbid condition of the urine is pathognomonic; then upon some newly discovered peculiarities of that fluid in general diseases; and, finally, upon certain urinary sediments and the source of urea.

In Beale's Archives for April of this year is mentioned a case of phthisis, in which a fungus was found in the pelvis of the left kidney, nearly filling it with a white pultaceous mass adherent to the apices of many of the pyramids. On detaching this, a ragged and somewhat softened surface of a yellowish-white color was left. The substance of the pyramid for a varying depth, averaging ⅛ of an inch, was of the same whitish color, contrasting strongly with the dark crimson of the congested tissue around. The diseased portions were firm, except at the top, and much resembled tubercle. Two or three of the pyramids of the right kidney were similarly affected to a less extent. The rest of the organs appeared healthy.

The pulpy matter proved to consist of the sporules and mycelium of a microscopic fungus, apparently a species of oïdium, which is fully described and figured. It resembles the penicilium glaucum in outline. There

was no sugar in the urine three days before death, and no history of diabetes; no signs of a similar growth were found elsewhere in the body; hence it is inferred that the fungus had crept up the urinary tract from aphthous patches which may have existed about the orifice of the urethra, or from some parasite of the skin.

Dr. Fleming exhibited to the Dublin Pathological Society specimens illustrative of primary cancer of the kidneys, and a cancerous tumor of the prostate. The patient, sixty years of age, had long been laboring under urinary disease which had resulted in incontinence, attended with occasional paroxysms of pain. There was a larger amount of fever than is usual, great thirst, unsteady pulse, and irregular bowels, without tenesmus. Had never had hæmaturia. A small amount of urine collected was acid and clear. There was no abdominal tumor, and no stone. There was a slight obstruction to the entrance of a sound, in the prostate, giving the sensation of a nodulated hardness.

Death occurred in a fortnight. Before death the incontinence became retention, and at the autopsy the bladder was distended with urine. The kidneys were greatly enlarged, adherent to the surrounding parts, and containing, upon the surface, and throughout their substance, numerous morbid deposits of a whitish-yellow color, of various sizes. The prostate was large, very hard, and nodulated. Section showed an isolated tumor, apparently cystic.

The specimens were instructive to the surgeon, as showing that symptoms in many diseases of these organs were treacherous: that all the suffering will be referred in some cases to the bladder, while in others all the distinctive symptoms will be referred to the region of the kidneys, and yet vesical calculus alone may be found to occasion local lesions.

Dr. Cheever reports two cases of supposed perinephritic abscess, which occurred in the Boston City Hospital. One, an anæmic girl of seventeen, in whom the menses had never appeared, had suffered for three years from incontinence of urine, but was otherwise moderately healthy. She had a fluctuating swelling, three inches in diameter, in the right lumbar region, without redness, and but little tender. This had been two weeks in appearing. No weakness of legs, no evidence of hip disease, no chills, but profuse sweats within the fortnight. The tumor was opened, giving exit to a considerable quantity of laudable pus, free from odor. A probe passed in three inches perpendicularly. No denuded bone felt; probe strikes an elastic wall. Nothing abnormal in the urine. Discharged, nearly well, in a month.

The other patient, an Irish domestic, age seventeen, was of healthy parents. Four weeks before admission, after wetting her feet, the menstrual flow ceased, and she had trouble in micturition, which at length resulted in complete incontinence. No dribbling, however, while recumbent. During night, passed water five or six times, owing to pain at meatus. Pulse 90, temperature 100°, bowels costive, tenderness in right lumbar region. Urine orange, acid, 1017, largely albuminous. A large amount of pus, but no casts or blood. She now began to have slight chills, followed by pyrexia, and in two months had fixed pain in right lumbar region. A troublesome cough set in. At the end of five months deep fluctuation being felt, a trochar was introduced, and about two ounces of thick, fœtid pus discharged; that last appearing was curd-like. A probe entered three inches, reaching a soft, elastic wall. No bone felt anywhere; no evidence of spinal disease or hip trouble. Shortly afterwards there was more pus in the urine, but less pain. Finally, signs of purulent absorption appeared, and she died two months after the puncture.

Dr. Homans, of Boston, reports a case of stricture with perineal fistula and large calculi in the pelvis of each kidney. The patient, sixty-six years, began to have difficulty in micturition six years ago. From that time gradually failing. Urine purulent, ammoniacal, and voided with pain. A year ago perineal abscesses discharged externally; in two months, after great pain and swelling in the perinæum, the urethra ruptured, and the urine escaped through a fistula. A catheter was finally made to pass the stricture, but the patient gradually failed and died.

Both kidneys were found to contain calculi of various sizes and shapes. A single one formed a complete cast of the cavity in which it was found—the left pelvis—and resembled some coral formations. It was two and a half inches long by one and a half wide; weight, one ounce. Many of the branches were cup-shaped, articulating with portions more deeply imbedded in the kidney, or receiving the papillæ of the pyramids. In the *right* kidney were irregular masses, from $\frac{1}{8}$ of an inch in diameter, downwards. A puruloid fluid filled the surrounding spaces. No pus cells were found, but many oil globules, granules, and crystals of triple phosphate. The adjacent renal tissue was gangrenous. The ureters contained the same offensive fluid and calcareous debris. Bladder thickened, mucous membrane dark green, and in many cases cribriform. The same fluid here. Middle lobe of prostate enlarged, but gland itself small, size of large filbert. Just anterior to membranous portion a fistula and sinus; the stricture probably here. Stone composed of urates, carbonate and oxalate of lime, and triple phosphate.

Mr. Southam records three cases of what appears to have been spontaneous fracture of vesical calculi in situ. Two were hard and compact, of uric acid and oxalate of lime, and had evidently been broken some time before their removal. Mechanical violence is eliminated as a cause of fracture, which Mr. Southam attributes to the generation of gas in the calculi themselves, either from chemical change of earthy constituents or decomposition of animal mucus, their cement.

Dr. Homans, of Boston, removed a small calculus from the meatus of a boy of four years, who had retention for twenty-four hours. The phymosis and œdema were so marked that it was difficult to find the preputial orifice. The patient was in great pain, with a hot skin and quick pulse. He was etherized, the prepuce slit up, and a calculus about one and a half lines in diameter, with facets, was found, completely occluding the meatus, and tightly imprisoned by the swollen prepuce. The urine began dribbling at once upon its removal, but was withdrawn by a catheter, to the amount of thirty-six ounces, with entire relief to the patient. The stone was of urates and oxalate of lime.

Dr. Leon Serbet, Aise, France, has used ergot in paralysis of the bladder with success. His patient was sixty-six years of age, and had been suffering from incontinence of urine for fifteen years. The doctor was called on account of paralysis resulting from over-distention during an attack of retention of urine. Ergot was tried, thirty grains during the day; no effect. At the end of ten days, fifteen grains were given four times daily at twenty minute intervals, before and after a hip bath in the morning. From this time he could urinate, and was cured in fifteen days. Ergot is thought to cure paralysis of the muscular fibres both of the body of the bladder, and of its neck.

Dr. Abbotts Smith calls attention to certain moral and dietetic points in the treatment of this disease. The bad habit of not getting out of bed to empty the

bladder at proper intervals should be counteracted. The quantity of fluids should be moderated, especially at night. This constitutes the secret of the "Dieta Sicca." This plan is useless when enuresis depends upon organic disease of the parts. Milk is recommended as unstimulating and easy to digest. Hot liquids taken as drink, especially tea, are objectionable. Patients should be cautioned against horseback riding.

Dr. Butler, of Maryland, relates a case of horseshoe kidney, in which the organ was in the pelvis, and could be felt per rectum. Four arteries supplied this anomaly, a single large trunk, from the aorta at its bifurcation, which was immediately in front of the sacra media, two from the left, and one from the right internal iliac.

There are now two specimens of the horseshoe kidney in the museum of Charity Hospital, at least one in the Wood Museum, and we believe one in that of the City Hospital.

Two cases of movable kidney were recently mentioned by Mr. Heckford, in the *Lancet*. The right was most freely movable in both, and in one, a woman, could be pushed on to the vertebral column.

Addison's Disease of the suprarenal capsules is the subject of a work by Dr. Edward Greenhow. An analysis of 196 cases is given, with every item of possible interest connected with each case. The object is to remove the doubts which many have entertained as to the reality of this disease, in order that, its existence being fully recognized, future inquiry may with more assurance be directed toward the investigation of its causes.

The *American Journal of Medical Sciences* contains two reports which serve as comments upon the foregoing. In one case there was extensive disease of the capsules without the slightest discoloration of the skin. The left was enlarged, and the right from two to three times its usual size. They were firm, and contained a large amount of opaque tubercular-looking matter.

The other case was of cancer of the pelvic viscera in an aged female, with a cancerous nodule one-half inch in diameter upon the peritoneal face of the right kidney. The organs were otherwise healthy. The suprarenal capsules had suffered a little fatty alteration, such as is commonly found after middle life; otherwise normal. There was intense bronze discoloration over a very large extent of surface, varying in depth of tint; very deep in the scar of a blister.

Albuminuria.—Fauvel gives the name *Aphonia Albuminurica* to aphonia depending upon œdema glottidis, which appears in incipient Bright's disease. Besides the tense swelling of the mucous membrane, with a pale smooth surface, the laryngoscope shows no local morbid process. The urine is found albuminous.

Professor George Johnson writes as follows upon the treatment of *Diarrhœa and Vomiting in Renal Disease.* From the *British Medical Journal:*—"Bearing in mind that the vomited matters are usually very offensive, if you direct to take copious draughts of tepid water your patient will often obtain relief by the speedy expulsion of foul secretions, and the thorough washing out of his stomach. This should be repeated from time to time. The food must be of the lightest and most digestible kind." He recommends hydrochloric acid, fifteen or twenty drops, with each meal, with one-thirtieth grain strychnia. The acid neutralizes the ammonia often thrown off abundantly. Sometimes vomiting will be relieved by a purgative enema, or, if the stomach will bear it, the compound colocynth pill to stimulate the lower bowel. Nutritive enemata are of use to support strength when vomiting is incessant.

The irritation of the bowels may be as great as that of the stomach. Tenesmus may sometimes be allayed *by the very guarded use of opium*, the effect being carefully watched, as there is great danger attending its incautious exhibition. The object is to allay irritation, not to close a safety valve. All this disturbance will disappear if the kidneys can be made to act. Besides the usual expedients, as counter-irritants, diuretics, hot-air baths, and the like, he highly recommends an incision into each leg when there is much anasarca. The fluid is rapidly drained away, the vessels unloaded, congestion relieved, and so a more copious secretion. The result of his experience is that in cases not complicated with valvular disease of the heart, inflammation rarely follows puncturing the legs, and the relief which follows the operation is often very great.

Glucosuria.—In August, 1861, G. Meissner announced his discovery of a true sugar in muscle. Dr. Johannes Ranke has reinvestigated the subject, and fully confirms Meissner's supposition. The following propositions are considered as established:

1st. That there exists a true fermentable sugar in muscle.

2d. That the amount of this sugar is increased by muscular action, including tetanization caused by strychnine or electricity.

3d. That the liver has no effect in causing this increase; for the sugar is proved to arise in the muscle itself, and from the muscular substance.

M. Collas, alluding to this fact, and the other that the substances required for the nutrition of the organs reach them in a soluble condition and are fixed by some substance unknown, advances the theory that phosphate of lime is the agent in question, since it converts sugar into the nearly insoluble glucose, thus precipitating and fixing it in the organs. He recommends phosphoric acid and the phosphates, and reprobates forbidding bread. On the strength of this Mr. Carey Lea, of Philadelphia, suggests that by parity of argument the mineral acids and alkaline nitrates might serve to fix albumen in Bright's disease! M. Guyot-Danecy proposes to employ citrate of soda as the fixing substance in diabetes. The citrate is substituted for the carbonate because it does not interfere with digestion. He administers from one to two drachms at a dose, which may be mixed instead of salt with the bread. With its use starch food ceases to be objectionable. He alleges that the sugar disappears from the urine after the exhibition of this salt.

Diabetic Phthisis.—The first general symptom of this rare disease, says Dr. B. W. Richardson, is severe hectic, the hot stage of which is extreme, and is succeeded by great coldness of the surface, depression, and copious elimination of urine. Dyspnœa is a marked symptom; a hacking, dry cough, is common. Hæmoptysis, properly speaking, he has not seen; but rusty sputum in small quantities is frequent. There is little acute thoracic pain, but great oppression. Wasting is extreme. The physical signs are marked. Cavities are not often found, death taking place too early to allow softening to occur; moreover the diabetes interferes with this process by removing water.

In pronounced cases the prognosis is inevitably bad, and generally definite, too, as to time: he has not seen a case survive four months after the tubercular condition was established. From six to ten weeks was the common term after hectic began to recur with regularity. In every case of the disease he had seen, there had been disease of the base of the brain. In one case there was bone pressing upon the under surface of the medulla oblongata; in another, softening of the brain substance; and in a third, disease of the vessels, with thickening of the membranes, and old adhesions. One of the patients had recovered from acute meningitis, to be taken immediately with diabetes.

That there is a functional and an organic type of diabetes; that the functional is largely curable, and the organic absolutely incurable; and that the functional type is connected with a false digestion, owing to a temporary interference with nerve action—these, he thinks, are facts which every scientific physician must be prepared to accept.

He is convinced that oxygen, iodine, or chlorine, with their compounds, do harm; they increase elimination and reduce accordingly. He discards a restricted diet. He sustains the warmth, and checks the waste of the body by opium and quinine; he supports by good food, especially the animal oils, which he gives as the Esquimaux take it, and for the same reason, to sustain the lost caloric. He thinks there is more hope in this than in any other remedy, used by the half-pint at a time. Dr. Abbotts Smith says that no remedy in the materia medica is of such value as this. It has a tendency to improve the blood by increasing the proportion of red corpuscles. His system of alimentation is exclusive of the starches.

Dr. H. Bence Jones says that the effect of dieting upon this disease is far beyond that of any known remedy. The potassio-tartrate of iron and Griffith's mixture are recommended, taken with some gaseous mineral water. Vegetable and animal oils and fat constitute important remedies; of these, cod-liver oil and cream are the best. A man, aged twenty-four, was admitted into St. George's Hospital, having lost two stone during eight months. He passed seven quarts of urine daily. He remained under treatment a month, during which time he was on animal diet and cod-liver oil. He began with half an ounce daily, and increased gradually up to eight ounces. The urine fell to two and a half pints, sp. gr. 1030, and he increased in weight from eight stone eight pounds to nine stone one pound.

Mr. Hare speaks most highly of the dietetic method. By perseverance, he reduced the sp. gr. in one case to 1007, yet there was a trace of sugar present. This is the lowest sp. gr. on record in which sugar has been found.

Prof. Bouchardat recommends energetic and systematic exercise, coupled with a diabetic regimen. Clarets are allowed, but not sparkling wines.

Sir Henry Marsh advocates the frequent use of the vapor bath and muscular exercise. It should be used not occasionally, but daily, for weeks or months, if necessary. This advice is founded upon the good results obtained in a case under his charge.

Dr. Ramskill has treated some cases very successfully with a mixture containing three grain doses of permanganate of potash, in water, and with increasing doses of extract of cannabis indica, in pill, beginning with a quarter of a grain three times a day, and going up to three grains.

Dr. Buttura, French, cured a ten years' diabetes with a seton to the neck. The sugar went as the pus came, and the patient remained well eight months after the withdrawal of the irritant.

Beranger Ferand has treated two cases of diabetes with partially favorable results, with tincture of iodine, five to fifteen drops of the French preparation, before each meal. In two other cases he found the sugar to diminish by large inhalations of oxygen—twenty quarts of gas night and morning. He does not think this treatment will *cure*, but that it is of great benefit.

Prof. J. H. Salisbury appears again as a discoverer of the zymotic nature of disease. This time it is rheumatism, which malady he considers four-fold, as characterized by the presence at one time of lithic acid, at another, oxalic acid in lime combination, or cystine, or phosphates. The characters of each are drawn out at some length. The fermentative part is taken by an oïdial cryptogam, consisting of spores and filaments, which are found in the blood and urine, together with the offending crystalline substances aforesaid. The name is *Zymotosis translucens*. It soon becomes invisible when placed between the slides. The following directions are given: "The blood should first be carefully examined under the microscope. To do this an incision is to be made in the arm, a drop of blood quickly pressed out, and received upon the slide. This should at once be covered and placed under the instrument and carefully watched, to observe the manner in which the red discs arrange themselves, and the condition of the colorless corpuscles. Very soon, amid the red discs and fibrin cells will be seen, here and there, masses of minute spores, and occasionally, ropes and knots of algoid filaments. Crystalline matters are also occasionally met with." The characteristic fungus is also found in the urine. How it differs from penicilium glaucum is not stated. The treatment is certainly "mirabile dictu." In three of the "species" it begins with four distinct prescriptions, one containing six ingredients. You look in vain, however, for those sovereign anti-fermentatives, the sulphites of soda. They are for once left out in the cold. To enjoy a diet of raw beef, finely chopped and mixed with yolks of soft-boiled eggs and cream, with other food, excluding, however, all sweets and acids; to be pounded thrice daily with a ball of curled hair, attached to a stick; to be blistered or fortified with tonics; to have warm baths occasionally, and frictions often, and finally to be resigned to some months, a year, of this interesting ritual—are some of the delights of the rheumatic.

M. Bordier, in a memoir detailing his experience of the cholera epidemic of 1866, refers to the changes in the urine before and during reaction. *Before this* it is found in all cholera patients to be albuminous. This is thought to be due to a parenchymatous nephritis, such as occurs in scarlatina. Heat does not always reveal the albumen. Nitric acid, however, precipitates it, but besides this cloud there appears, in severe cases, a sediment of a mahogany color. This color changes to blue, and then the bottom of the glass is covered with a layer of indigo-blue, soluble in ether, and almost entirely composed of pure carbon. *During reaction* this fluid contains double the normal amount of urea, with uric acid, substances rich in oxygen. Albumen is still present, though only for a short time and in small quantity; but sugar now appears. The thirst is again felt, and the body is covered with boils. Glucosuria is a constant symptom in reaction, as albuminuria is in the algid state. This is thought to be due to paralysis of the vaso-motor nerves, which characterizes this period, and which acts upon the liver as well as the other viscera, and causes passive dilatation of the blood-vessels.

Urinary Sediments.—In the *Lancet* for Feb., 1867, is figured a tube and stand for the more expeditious collection of objects for microscopic examination. It resembles the chemist's burette, but is furnished with a stop-cock below. We have used a burette with the German spring valve, and prefer it, with a short point, to the English arrangement.

Dr. D. W. Flora, of Chicago, remarks that the dumb-bell crystal of so-called oxalate of lime is not a primary but a tertiary form. He claims that they are a modification of the globular, stellate crystals of urate of soda, which become after a time joined two-and-two by an isthmus. "The primary form is acicular, the secondary globular, and the tertiary the *famous* dumb-bell." Dr. Flora does not seem to be aware that a dumb-bell

form of the urate of soda has been known for some years, and is figured by Hassal in his work on the urine. Six kinds of dumb-bell crystals are found in human urine, and a seventh in that of the horse, carbonate of lime. Uric acid, phosphate of lime, oxalate of lime, sulphate of potash, and the urates of soda and of potash, are the six referred to.

The tests for the oxalate are liquor potassæ and acetic acid, both with heat; neither has any effect. If Dr. Flora had made use of these, he would probably have seen his dumb-bells rapidly dissolve; the best proof that they were not oxalic. We have proof that the oxalate dumb-bell *is* a primary form in that it has been found in hyaline casts of the tubules.

Dr. F. Bateman, in the *Lanc t*, reports a case in which sarcinæ were, at intervals, found in the urine of a gentleman suffering from dyspepsia and neuralgia. He had a long-standing stricture of the membranous portion; and a frequently-recurring prostatic irritation had recently been relieved by the passage of several small prostatic calculi. This affection is quite rare, and no attempt has been made to explain its origin. Bennett has seen but one case. Bea'e mentions a few instances; Neubauer and Vogel only allude to two cases.

With regard to the *source of muscular energy and its relations to the excretion of urea*, the experiments of Frankland, Fick, Wislicenus, and Parkes, seem to prove, that during exercise the urea is diminished, or but slightly increased, and that muscular power is not therefore so much derived from oxidation of albuminous as of non-nitrogenous material. Hence it is argued that the urea cannot be taken as a measure of the force expended, or the waste occasioned. Also that persons training for muscular feats should not live upon a diet restricted to albuminous substances. The experiments of Dr. Noyes detailed in the *Am. Journal Med. Sciences* seem to prove that such a diet will increase the excretion of urea considerably, part, at least, of the increase indicating the excess of albuminous ingesta.

These are some of the more interesting facts and opinions, relating to our subject, which have been hurriedly gleaned from a large number of foreign and domestic journals.

RUPTURE OF VAGINA DURING LABOR.

CHILD PARTLY AND PLACENTA ENTIRELY WITHIN THE ABDOMINAL CAVITY.—DELIVERY BY FORCEPS, AND RECOVERY OF THE PATIENT.—SUBSEQUENT PREGNANCY, AND DELIVERY OF A STILL-BORN CHILD BY INSTRUMENTS.

By T. B. STIRLING, M.D.,

NEW YORK.

On January 10, 1863, my services were required in the case of Mrs. P——, then in labor. The pains were violent and ineffective. The cause of the difficulty seemed to be the anteversion of the uterus. The abdominal walls were very pendulous, extending upon the thigh nearly half way to the knee, giving the tumor of pregnancy an ovoid shape, much elongated. This prevented the head from engaging in the superior strait; examination showed that it could not be reached per vaginam. The pendent tumor was raised and supported in this position, so as to bring the axis of the uterus more nearly in line with the axis of the strait, and thus favor the passage of the head. The labor now went rapidly forward, and a living child was born in less than an hour.

The woman was of tall, spare figure, thirty-six years of age; had given birth to six children, and joined to the usual household labors of her class, the occupation of a tailoress, assisting her husband in the common living room, which was also the workshop. To hard work, and to the necessity of maintaining a sitting posture when at work, she attributed the extreme laxity of the abdominal walls, and the pendulosity of the tumor of pregnancy, which caused the difficulty of her labor.

The circumstances of this case had passed out of mind for two years and a half, when, on the 9th of July, 1865, my services were again desired, but being out of town, I did not see the patient until late. On arriving at the house, I was informed that labor pains had commenced at 12 M., recurring every half hour, but not deemed sufficiently severe to require assistance. About 5 P.M., while she was sitting on a chair, the waters broke, without a pain. At 7 P.M. the pains became suddenly so violent, that she alarmed all around her by her unusual and agonizing outcries. So continuous, sharp, and forcible were they, that any preparation of her bed or person for the exigencies of labor was deemed impossible. At the time of my arrival, 9 P.M., the pains had nearly ceased, but she had the appearance of having passed through great excitement, and her expressions concerning her sufferings were a little wild for one who had borne six children, and was habitually self-restrained and reticent.

A hasty examination was made, and the finger came promptly in contact with the corrugated scalp, just within the vulva. The excessive pendulosity of the abdominal walls was noticed, which recalled the previous confinement, and the kind of assistance then rendered. A tumor over the pubes was faintly noticed in the median line, with the apex below and the base as high as the umbilicus. The true significance of this was not appreciated at the time, but the idea of an abnormal tumor obstructing the labor occurred to my mind. It was ascertained by examination not to be distended bladder. Its shape was more like a uterus, after delivery, before it has fully contracted. Nothing of a positive character being determined, the examination was discontinued, the patient complaining of pain under the touch, and there being no pressing necessity of pursuing it further. The labor pains had now entirely ceased. The attendant female was directed to support the pendent abdomen, as had been done in the previous labor, and traction was made with the fingers, used as forceps. Pains were feebly excited by this means, but the head was not advanced.

Taking advantage of this interval of rest, the patient's attendants were directed to make her bed more comfortable, and to change her dress, while I awaited in the other room, the expected early renewal of the pains of labor. The patient made not the slightest complaint, and apparently was sleeping. Thinking the pains were delayed too long, about 12 o'clock an examination was made, which revealed the fact that the head had somewhat receded. The tumor over the pubes was still well defined, and a hard projecting point was felt just above the umbilicus and a little to the left of it, very near the surface. Rupture of the uterus was at once suggested, and the irregularity of the abdominal walls was recognized as some portion of the lower extremity of the child. The countenance of the patient was quiet and not indicative of exhaustion; the pulse rather weak, but without excitement. The fœtal heart could not be heard. Being convinced of the diagnosis of rupture, which had probably taken place several hours before, and there being nothing in the condition of the woman to excite immediate apprehension, I left her and went in search of medical aid. Dr. Thomas F. Cook came to my assistance, reaching the house about

3 1-2 A.M. He examined the case, and confirmed my diagnosis. He also was of opinion that the moment of rupture was during the sudden access of pain described above as occurring about 7 1-2 P.M.—an hour and a half before I reached the house. Dr. C. gave chloroform, and the child was withdrawn by me with the forceps without difficulty. It exhibited no signs of life—the ordinary means of resuscitation being tried without success. The appearance of the child favored the opinion that it had been dead some hours.

In completing the delivery, the cord was followed through the rent into the abdominal cavity by the left hand. It led, by turning a sharp corner, to the lowest part of the sac formed by the pendent abdominal walls. Here the placenta was grasped within the peritoneal cavity, brought up through the rent and so delivered. In doing so, the following points were noted. The os uteri was found to be closed; the rent was situated in the vaginal space behind the cervix; the promontory of the sacrum presented to the hand in passing a very sharp angle; the fundus uteri was grasped in the hollow of the hand and ascertained to be unruptured; the placenta was small, and the blood squeezed out of it, as a sponge. The delivery being completed, Dr. C. examined the rent and verified the fact of the rupture and its locality in Douglass' space. In applying the bandage, the laxity of the walls was made very apparent. It was necessary to direct the attendant to steady the sac full of intestines in the abdominal space like a bag of meal, while the binder was applied very loosely. The abdominal walls formed a fold over the pubes, extending several inches downwards on the thighs.

No hope of recovery was entertained by me, Dr. C. thinking it barely possible. Anodynes and stimulating nourishment were ordered. The patient was assiduously watched, two or three visits being made each day, but some difficulty was experienced in controlling the sister, who officiated as nurse, so as to secure the proper administration of a stimulating regimen. The patient, however, remained quiet and free from pain till the fourth day. Then tympanites and prostration were noticed, and turpentine stupes, and afterwards a cataplasm, were applied over the entire abdomen. This afforded temporary relief, but on the sixth day the lowest degree of prostration was reached and apprehension was entertained that the end was near. But under vigorous stimulation, she rallied and recovered from this condition. On the ninth day an attempt was made to relieve the distressing tympanites, by inserting the tube of a stomach-pump far up the rectum. This secured the desired passage of much flatus, but next morning she had a profuse diarrhœa, with pulse at 106, and a distressing palpitation of the heart. These symptoms were relieved by Tr. Opii—gtt. xxv., 2dis horis. On the twelfth day, at a point about three inches below the umbilicus, the abdominal walls were noticed to be exceedingly thin, and a nipple-shaped protrusion was forming. The fold lying over the pubes was red, thickened, and distended. The general tympanites became enormous. This protrusion proved to be an abscess, which went on increasing till the evening of the fourteenth day, when it burst externally, discharging a very large quantity (said to be enough to fill a wash basin once and a half full) of thin, greenish, fœtid fluid. This was probably made up of the putrid products of peritonitis, the meconium of the child, and the blood that escaped from the placenta when in the abdominal cavity. For three days before the bursting of the abscess, the pulse kept steadily at 128; the great prostration reappeared and dissolution seemed imminent. On the twelfth day, the first digital examination was attempted, to ascertain the condition of the rent, and a hernial tumor was discovered *filling the entire vagina to the vulva*, at first giving the impression that the intestine had fallen through the rent.

In these newly discovered complications the counsel of Drs. Cock, Little, and McLeod was sought in turn. Many examinations were made, as far as possible, without the speculum, the patient refusing to permit its use. No positive opinion of the character of the tumor in the vagina was arrived at, but the impressions left on my own mind by the consultations were these. The tumor in the vagina was probably entirely omentum, altered by inflammation. It had fallen through the rent, completely plugging it up, and preventing the exit of the material which afterward composed the contents of the abscess. The cavity of the abscess was probably confined to the abdominal walls, but communicated by some free channel with the peritoneal cavity. In the vagina the rent was distinctly traceable all around the base of the tumor, to which the edges of the rent seemed to be agglutinated. The elongated slit of the os uteri was readily recognized in front of the tumor, and the uterus was, after some doubting, agreed to be not adherent to the abscess by its posterior wall. There had been a sanious discharge from the vagina on the second day after delivery, probably originating in the uterus, but the great discharge constantly expected did not make its appearance, being effectually stopped by the occlusion of the peritoneal cavity, by the omentum protruding through the rent.

A colpeurynter pessary was placed in the vagina for a few days, farther protrusion of the viscera being apprehended. Both the abscess and the vagina were freely syringed every day by the deep insertion of the vaginal nozzle. The cavity of the abscess was often swept by the finger in course of examination, the mouth being at least an inch and a half in diameter. Poultices were kept constantly applied up to the twenty-seventh day, when Bals. Peruv. was substituted. The patient rapidly convalesced after the breaking of the abscess, experiencing no inconvenience in her functions from the tumor in the vagina, and sat up for the first time on the twenty-eighth day.

(Fifty-sixth day)—Sept. 2d. I found her at work, in nearly her usual health, but also found myself in disfavor, because she had recovered in spite of my unfavorable prognosis, and I therefore did not venture to propose, as I much desired, an examination of the parts. On June 9, 1867, two years after, I called again, to ascertain her present condition, so as to be able to complete this history, and was much astonished to learn that she had been, in the intervening period, delivered by instruments of a still-born child. I applied to the gentleman who officiated on that occasion, and he kindly furnished me with a detailed statement of her confinement, which took place on the 30th Nov., 1866. He had received no history of the previous labor to guide him, as it was designedly kept from him by the parties. He says in his report, that the pains died suddenly, in about an hour after they had become strong and forcible. He waited three quarters of an hour, and then he had recourse to forceps, becoming convinced that the child could not be delivered without instruments.

He is of opinion that Mrs. P—— can be delivered of living children, but only with instruments *applied early*. The grounds of this opinion are not stated. The death of the child is attributed to the premature separation of the placenta, a few minutes before the birth of the child. The abdominal walls did not strike him as abnormally large or lax. No cicatrice or tumor was remarked. No difficulty in coition had been experienced by the husband, and the possibility of conception had been fully demonstrated.

Original Lectures.

LECTURES ON TUMORS:

BEING PORTION OF THE COURSE ON SURGERY AT THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

SESSION 1867–8.

BY S. D. GROSS, M.D., LL.D.,

PROFESSOR OF SURGERY.

(Reported expressly for the MEDICAL RECORD.)

II.

NO. II.—VASCULAR TUMORS.

CONCERNING these I have little to say. The vascular tumor is an uncommon form of tumor, comparatively speaking. We observe it most frequently as a mother-mark, a viscus as it is called, a little speck existing upon the skin, generally of the forehead, or of the nose, or the eyelid, or the lip, or the cheek; it may be, the ear, sometimes the neck, sometimes the shoulder, or the trunk, or an extremity; sometimes several of them occurring simultaneously in different portions of the body; sometimes on the inner surface of the cheek in connection with the mucous membrane. The best example I can give you is an internal hæmorrhoid or pile, the result of frequent straining, producing thus a determination of blood to the inferior portion of the rectum, followed by habitual distension of the capillary vessels in the submucous cellular tissue, as well as in the substance of the mucous membrane, so as to form a tumor the size of a common marble, or a pullet's egg; composed essentially of a congeries of capillary veins or arteries, united and supported by cellular tissue, bleeding copiously when incised or excised. A nævus may be composed essentially of capillary veins or capillary arteries; or it may be composed of a combination of the two, the one or the other usually predominating. When a tumor is composed of veins its color will be purple, or modena, or livid; when it is of arterial tissue, it will be scarlet, and there will, at the same time, be pulsation synchronous with the contraction of the left ventricle of the heart. Such a tumor constitutes what was originally described by John Bell, of Edinburgh, as aneurism by anastomosis. When consisting both of veins and arteries there may be slight pulsation, or an absence of pulsation.

Such tumors require excision when they are situated favorably; or instead, you may transfix the base of the growth, when it is comparatively small, at two opposite points, with two pins, and wrap around them a strong ligature to strangulate the affected tissues, performing the operation in the manner you have seen me execute it at the Clinic.

III.—ADIPOSE OR FATTY TUMORS.

The adipose or fatty tumor is of sufficiently frequent occurrence. It consists of a mass of fat similar to that in the parts around, being simply an outgrowth of the natural, preëxisting or original fat. Under the microscope it is found to be composed precisely of the same cells with the same characteristics; chemically it consists of the same constituents precisely, and it has the same properties precisely as that tissue. Why it should grow into a tumor, we cannot of course determine. A tumor of this kind may be single or multiple. In one case I saw upward of two hundred in the body of the same individual, a medical student who attended my lectures in the University of Louisville. In such numbers they are unusual. Generally the tumor is single, situated most commonly in the subcutaneous cellular substance. Sometimes such a tumor is pendulous, hanging off from the body in a mass of considerable size. Generally speaking, it has no very distinct capsule; there is usually a slight condensation of the cellular tissue around it, so that it might be called a distinct envelope. Such tumors have comparatively few large vessels; nevertheless they are capable of acquiring a large bulk. When we remove such a tumor we do not expect much hæmorrhage, for the vessels distributed through the tumor are generally very small. It has its nerves and absorbents, which are not of new formation any more than the tumor itself. It may acquire a bulk of twenty, thirty, forty, or even seventy pounds. Dr. Bray, of Evansville, Indiana, removed one some years ago, weighing forty pounds; and Prof. Leidy, of the University of Pennsylvania, presented me with a section from such a tumor weighing seventy pounds, removed from the cavity of the abdomen of a man after death. Its growth is slow, a number of years usually elapsing before it attains any considerable bulk. When subjected to frequent or constant pressure, as when it is situated on the shoulder, it may take on ulcerative action; but ordinarily it grows on, gradually developing itself, without any untoward occurrence of this kind. It is not capable of assuming malignancy under any circumstances.

The proper remedy is excision. Nothing else has been found to answer the purpose.

I need not call your attention to the different forms or configurations of these tumors. In the groin and neck they send out processes in different directions, which we are obliged to dig out, as it were, during the operation of extirpation.

IV.—HORNY TUMORS.

The horny tumor, or horny excrescence, is a very curious formation, apparently entirely epithelial in its character, an outgrowth from the epidermis, and from the sebaceous follicles. There is still some obscurity with regard to the origin of a growth of this kind, but such we are willing to believe is the method of its development. Tumors of this kind are capable of acquiring considerable dimensions. There are records of their being ten, twelve, fourteen, and sixteen inches in length, and of proportionate diameter; sometimes as a single horn, at other times multiple with ramifications precisely like the horns of the inferior animals. The color is usually brownish, from exposure of the part to the atmosphere; and if a section is made, it will be found to be longitudinally laminated, growing in that way by layers. The surface is frequently rough, imbricated, or scaly. It is, of course, entirely insensible; it has no vessels in its interior, so far as we are able to determine, but its base is, of course, more or less vascular. Chemically, it is found to be composed chiefly of albumen, with phosphate of lime in combination with some sulphates. Under the microscope, it is seen to consist of an immense number of exceedingly minute epithelial cells of various shapes, round, oval, and conical. The most common situation of such a tumor is the scalp, frequently the forehead, sometimes the face, sometimes the upper or lower lip, sometimes the shoulder, sometimes the extremities, sometimes the buttock. I show you one I removed from a lady now nearly ninety years of age; it grew from the side a short distance below the left mammary gland, and she has another one growing in the right axilla. A tumor of this kind has been found upon the penis and upon the vulva; indeed, there is hardly any part of the body where it has not at times been found.

The proper remedy is excision, cutting out the parts from which it has sprouted.

V.—FIBROID TUMORS.

The fibroid or fibrous tumor consists of tissue similar to the fibrous tissue in the natural state. It is composed of fibres or threads crossing each other in every conceivable direction, forming thus a very tough, strong, condensed resisting tissue, grating under the knife. A tumor of this kind has occasionally a distinct capsule, but generally it is devoid of a covering of this kind; the cellular tissue around it is always more or less condensed. The tumor is provided with blood-vessels, nerves, and absorbents, precisely as the fatty tumor, and these are sometimes of new formation; at other times derived from the surrounding structures, shooting into them, as in false membrane of the pleura or peritoneum. Tumors of this kind grow slowly, years sometimes elapsing before they attain considerable volume or expansion. By and by such a growth will take on an increased activity, and then develop itself with great rapidity. It is capable of acquiring a large bulk. A case reported by the late Dr. Francis, of New York, connected with the uterus, weighed 105 pounds, nearly as much as the woman in whom it was developed.

These tumors are liable to occur in various parts of the body; sometimes under the skin, sometimes in connection with the testes, or ovary, or uterus, or some other internal organ, the periosteum, the interior of a joint, etc. The largest growths of this kind occur in the uterus, either in the interior of the organ, in its wall, or upon its outer surface.

There is a fibrous or fibroid tumor which bears the name of *fibro-plastic*. This tumor is simply a modification of the original fibroid tumor as described. We have an illustration of this variety of tumor in the keloid growth, or crab-like tumor. It contains fibrous tissue in combination with plastic tissue, a large quantity of fibrin in a state of organization, more crisp than the fibroid tissue, not as tough.

Now and then we meet with what is called the *recurring fibroid tumor*, a very singular kind of growth. A man comes with a fibroid tumor on the shoulder, or upon the face or back of the neck, if you please; this tumor may be the size of the fist, or it may not be larger than a goose's egg or a pullet's egg, comparatively small; it may be of two or three years' standing; it may be entirely free from pain, with no discoloration of the skin, nothing at all showing that it has any malignant tendency. The tumor is carefully removed, completely excised, every particle being disposed of in this way. In the course of twelve or eighteen months, or two or three years, as the case may be, a tumor of precisely a similar kind will arise in the same spot from which the other was removed. Such a tumor, we say, is a recurring fibroid tumor. A second tumor of this kind may be carcinomatous, that form known as encephaloid.

In the removal of such a tumor there may be a good deal of difficulty; it may be deep seated, may send ramifications among the surrounding structures to a considerable extent; may involve the muscles, nerves, arteries, and veins, so that a nice dissection is required. The proper remedy is excision; nothing less.

VI.—CARTILAGINOUS TUMORS.

The cartilaginous or enchondromatous tumor, or the enchondroma, as it is called by Müller of Berlin, by whom it was first accurately described, stands intermediate between the fibroid and the bony or osseous tumor. The largest tumor of this kind I ever saw was in a young man, a native of Massachusetts, who died six weeks after visiting this city: it involved the right shoulder, and was found to weigh thirty-one pounds; a mass which could have been removed very readily, as was shown by Dr. Jackson, of Boston, had an operation been performed at the proper period. These tumors occur in different portions of the body, most generally in connection with a bone, sometimes in the intermuscular cellular tissue, sometimes in the ovaries, uterus, mammary gland, or other organs of the body. They are slow in formation, non-malignant in their tendency, giving rise to pain, but chiefly incommoding by their weight and by their pressure; so far as we are able to determine, they are not disposed to run into malignancy, or to degenerate into carcinoma. A tumor of this kind frequently contains a large quantity of bony matter, especially when the growth is of long standing, when it is liable to degenerate into a bony, osseous, or a calcareous formation; but in its earlier stages it is of the appearance of cartilage or fibro-cartilage, as the fibro-cartilage of the nose or larynx. As it increases in age it becomes more hard, firm, and resisting, until it degenerates into bony substance. Examined with the microscope, we find it is composed, like all the other tumors, of cells containing nuclei and nucleoli of variable size; chemically considered, it is found to be composed of chondrin, a peculiar form of jelly, the precise character of which has not been determined. It is more dense, firm, and resisting than the fibroid tumor; less so than the bony. There is no distinct cover in a tumor of this kind, but the cellular tissue which lies in immediate contact with it is always more or less condensed; but there is nothing like a distinct capsule or envelope, except in very rare cases. Such a tumor has its proper blood-vessels, nerves, and absorbents. The blood-vessels are never of large dimensions; consequently, when a tumor of this kind is cut into, it does not emit much of this fluid; and therefore, when it is extirpated, provided the knife is kept in close contact with its periphery, there will be very little hæmorrhage, even if the tumor is of very large bulk.

Such a tumor is not amenable to the absorbent vessels, and the sooner it is removed, the better for the part and system; if it be developed from a bone, this must be removed with it.

VII.—OSSEOUS OR BONY TUMORS.

Growing from the posterior portion of the shaft of a thigh bone which I hold in my hand, is a ledge of bone, a small tumor, very narrow and thin, having almost a sharp, free margin, and connected with the bone from which it grows. This is an osseous or bony tumor. Very frequently the term exostosis is applied to this form of tumor, from a Greek compound, signifying to grow from a bone. It consists of precisely the same material as the bone from which it grows. A tumor like this is susceptible of acquiring great bulk, as in one of the specimens of the disease of the thigh bone exhibited, and sometimes acquires a much larger development, and when this is the case it is easy to conceive the encroachment it would make on the surrounding structures. It would produce great pain and tenderness in the part, leading to a necessity for the removal of the tumor, or the amputation of the limb. I show you an hemispherical tumor taken from the posterior part of the skull of an elderly subject, who had carried it for many years. It is a specimen of condensed bony tumor, containing a large quantity of carbonate and phosphate of lime. The word ivory is used to designate this form of tumor; it is the eburnized variety of exostosis. Tumors of this kind are of slow growth; there is no tendency to malignancy; they may remain latent for many years. After a while they may acquire an increased activity, and in this way ultimately attain a very large bulk.

Such a tumor, when found to incommode the parts by its pressure, its interference with important func-

tions, requires removal; and in some cases, as when connected with an extremity, amputation of the limb.

VIII.—CALCAREOUS TUMORS.

The calcareous or earthy tumor is exceedingly uncommon. I have seen but very few cases of it, and I have no specimen to exhibit to you. We find this form of tumor occasionally in connection with the lymphatic ganglions of the neck in a state of degeneration; we find them occasionally in the interior of the uterus and of the ovary, consisting of calcareous matter, composed mainly of carbonate and phosphate of lime arranged in such manner as to be exceedingly brittle, having none of the osseous tissue properly so called. This form of tumor is interesting in a pathological rather than in a practical point of view.

IX.—NEUROMATOUS TUMORS.

The nerve tumor, or neuromatous tumor, or simply the neuroma, presents us with two varieties, the neuromatous tumor proper, and the subcutaneous painful tubercle, or a peculiar form. The neuromatous tumor is connected with the large nervous trunks, as, for example, the sciatic, the median, and the radial and ulnar nerves, which are the structures more particularly liable to suffer; but sometimes we find them in connection with the smaller nerves, and sometimes in large numbers in the sympathetic system. Sometimes they are solitary, at other times they are multiple. Dr. Robert Smith, of Dublin, by whom these tumors have been better described than by any one else, has given a case in which there were upwards of one thousand found along the course of the great trisplanchnic system of nerves. There would seem, therefore, to be occasionally a neuromatous diathesis. This tumor, if it be carefully examined, will be found to exist simply in an expansion of the nerve fibres, which are spread like feathers, or the ribs of a fan, inclosing a large quantity of fibroid tissue, a substance similar to that entering into the composition of the fibroid tumor. Under the microscope it is found to contain, of course, cells with nuclei and nucleoli of a particular character. Tumors of this kind are capable of acquiring considerable bulk, as the size of the fist, or a small head. They are slow in their formation, attended with more or less pain, and more or less numbness in the distal portion of the extremity, when the development occurs in one of the limbs.

Tumors of this description should be allowed to remain unmolested, unless they are productive of much pain and inconvenience, when we are obliged to interfere; the proper plan being to cut down upon the tumor, and enucleate it, allowing the nerve fibres to retain, if possible, their integrity. If this be impracticable, we do not hesitate to cut out the tumor as we would any other, exsecting it very carefully, dividing the nerve above and below the tumor, a procedure which will be followed by a loss of function in the distal portion of the limb, and may lead to mortification, as in a case reported by Drs. Dalton and Hoffman of Ohio.

The other variety of nerve tumor is known under the name of the *Subcutaneous Painful Tubercle*, originally described by Petit, and afterwards more distinctly by Cheselden, in the last century. You observe a little spot immediately beneath the skin, which it lifts up, as it were. It is connected with the superficial nerves which run immediately beneath the skin. This tumor is liable to occur in various parts of the body. It is usually considered to be more frequent in the inferior than in the superior extremity, but such is not the result of my own observation, which is, that it is found most frequently about the upper extremity and shoulder. It may be single or multiple; sometimes there are eight or ten, or even twenty, in the same individual. It is always productive of exquisite pain of a neuralgic character. Even one solitary tumor of this kind, not larger, perhaps, than a pea, a filbert, or a small almond, will be sufficient to make the patient perfectly wretched in consequence of the severity and constancy of this pain. It is sharp and shooting, or dull and heavy, liable to be aggravated by changes of temperature, and other causes.

The proper remedy is excision.

Reports of Hospitals.

NEW YORK HOSPITAL.

FEMORAL ANEURISM CURED BY COMPRESSION.

Service of Dr. C. M. Allin. House Surgeon, Dr. Charles Washburn, who has furnished notes of the present case, which will be followed by another in which the same treatment was employed.

Peter L——, æt. 19, native of New York, burnisher, admitted Aug. 13, 1867. At half-past eight o'clock, on the morning of admission, the patient had received a stab in the right thigh, the incision being an inch and a quarter in length, three inches below Poupart's ligament, parallel with the femoral artery, and almost directly over it. At the time of the accident, profuse venous hæmorrhage had occurred, but ceased spontaneously. On admission the wound was perfectly clean, the pulse rather feeble and accelerated, the skin cool and moist.

The patient was put to bed, and the wound left open for about five hours, when, no hæmorrhage appearing, it was closed with sutures, and a compress was applied over it with moderate firmness. At 6.30 P.M. the hæmorrhage recurred. On removal of the compress and sutures, the limb was found very much swollen, and the tissues about the wound were infiltrated with blood, which was still rapidly welling up, mostly venous, with a slight arterial admixture. The wound was enlarged, and an attempt made to find the bleeding vessel, but unsuccessfully. The femoral being uninjured, the artery wounded was probably the deep external pudic. A conical compress was placed in the wound, and completely arrested the hæmorrhage from both artery and vein. It was held in position by a Signorini tourniquet, which at 9 o'clock the next morning was removed, leaving the compress undisturbed. Two days later this also was removed; and the wound, now beginning to discharge, was syringed out with liq. sodæ chlor., its edges were slightly approximated by adhesive strips, and a dressing of lint and simple cerate was applied.

On the 18th the wound was filling up with healthy granulations. Above it, and to the inner side, was to be felt a decided induration, to which a pulsation was communicated. On the 20th the pulsation was more distinct, the hand perceiving a lifting sensation with each beat; and a single systolic *bruit* could be heard. All pulsation was arrested by compression of the femoral at the brim of the pelvis. The tumor was very much diffused, and its margins were not well defined. The point of most marked pulsation was situated 2½ inches below Poupart's ligament and 1½ inch to the inner side of the sartorius. The next day, the limits of the tumor were becoming sharper, and the *bruit* was more distinct. Pressure would empty the sac, which refilled by successive pulsations. The thigh was somewhat increased in size, but no part of the limb was œdematous. The patient beginning to complain of

severe neuralgic pains about the tumor and extending down the thigh, a hypodermic injection of 15 drops of Magendie's solution was administered at night.—Aug. 24th. A consultation was called at which Drs. Allin and Krackowizer were present. The tumor was still increasing in size, was now quite circumscribed, and about 3½ inches in diameter. Circumference of thigh over tumor 20½ inches, that of opposite thigh at same point 18 inches. No diminution in force of the tibial arteries. Inguinal glands enlarged and very tender. It was decided to employ compression of the femoral just below Poupart's ligament.

Aug. 25th.—Compression was commenced at 4 P.M. A Signorini tourniquet was used, modified by affixing a broad pad to the lower limb of the instrument, while the upper pad was made quite thick, in the shape of an inverted conic frustum. This was brought down so as but partially to occlude the artery, leaving pulsation in the tumor barely perceptible. The pressure was well borne until 10 o'clock that evening, when the patient began to have great pain at the point of compression, though that about the tumor and in the thigh had quite disappeared. The tourniquet was slightly loosened, and half a grain of morphiæ sulph. exhibited hypodermically. This induced a sound sleep, during which the instrument was again tightened. The patient remained comfortable, and the pressure was steadily maintained until the 28th, producing no œdema, or change of temperature in the limb. The chief embarrassment arose from the enlarged and tender glands just below the point of pressure. The wound had begun to cicatrize. On remitting the pressure the pulsation in the aneurism was found to have somewhat diminished, while its walls had become thickened in a marked degree. Pressure was renewed so as almost completely to stop pulsation in the sac, though that in the artery below the pad was still distinct.

Aug. 29th.—At 5 P.M. compression was removed, when the tumor was found perfectly consolidated, and all pulsation in it had ceased. The pulse in the femoral retained its normal force and freedom. The skin under the pad was uninjured. The apparatus was left loosely in place until next morning, 30th, when it was removed. The tumor then gave to the fingers a sensation of almost stony hardness. The thigh at this point measured 20 inches. The patient was free from pain, and very comfortable; had slept well, without an anodyne, since the 28th. The wound had nearly healed. On the 5th of September the patient was out of bed; the tumor softening; thigh measuring 19 inches. The case progressed favorably, and on the 16th September, the wound having fully healed, the patient was discharged cured.

OPERATIONS UPON PATIENTS WITH HEART DISEASE.—Mr. Paget, *Lancet*, does not believe that operations upon persons with heart disease are on the whole attended with a great deal of danger, and he affirms that the risk of chloroform is far less than the shock of the operation. Mere irregularity of the pulse, if it does not depend upon valvular disease or fatty degeneration of the heart, does not affect materially the chances of recovery.

CHLORATE OF POTASH INJECTIONS IN VESICAL CATARRH.—Vesical catarrh of a year's standing has been cured (*Southern Jour. Med. Sciences*), by injecting the bladder daily with four to six ounces of solution of chlorate of potash, one drachm to eight ounces of water, retained half an hour to an hour. The patient was a female, who had suffered greatly from the disease.

Progress of Medical Science.

INFLUENCE OF OPERATIONS UPON THE NERVOUS.—Let me tell you of the people that are commonly called "nervous." I do not refer to those with manifest disease in any part of their nervous system, but to those that are exceedingly sensitive, mobile, and excitable, whether in their sensitive or motor organs—who are very emotional, and with their whole cerebro-spinal nervous system altogether too alert. You will find them and their friends always apprehensive of the results of operations: they will tell you that they are so nervous they can bear no shock; and they look with the greatest apprehension upon the infliction of any injury. All this is fallacious. You may be surprised at observing how very little influence upon their organic processes this excessive vivacity of their cerebro-spinal system exercises. Time after time I have found patients who have complained of agonies in their wounds, and I do not doubt have felt them, but whose pulses have been unmoved. They have had enormous pain, but no fever, no single sign of disturbance of their general nutrition; they have had spasmodic movements of their limbs, tremblings, and rigors, but no mischief has followed. Besides, the same mobility of mind which makes these patients very fearful before an operation, makes them hopeful directly after it; and amongst all the people that can in any sense be called invalids, I know none who more generally pass through the consequences of operations with impunity than do those who are commonly called nervous, and whose nervousness consists, if I may use the expression, in too great a vivacity of their whole cerebro-spinal system.—JAMES PAGET, F.R.S., *Lancet*.

INCOMPATIBILITY OF POT. IODID. AND POTASS. CHLORAT.—This is an important point in practice, for in syphilis, to act at the same time upon the ulceration of the mouth and the general malady, chlorat. potass. and pot. iodid. are frequently given. This practice is dangerous, as has been demonstrated by M. Vée; for the chlorate of potash, absorbed simultaneously with the iodide of potassium, may part with its oxygen, and transform it into the iodate, a poisonous agent. The recent experience of M. Melsens proves the possibility of this transformation.

This ought to suffice to prevent, were it only as a precautionary measure, the simultaneous administration of the chlorate of potash and the iodide of potassium.—*Gazette Méd. de Paris*.

RESECTIONS.—M. Sedillot has written a letter to the Imperial Society of Surgery, on the regeneration of bone. It is too long for quotation entire, but of great interest. He contradicts the two principles of sub-periosteal resection in the following terms:

One, to which Larghi has given the general name of sub-periosteal resection, is founded on the idea that the periosteum detached and isolated in the condition of a sheath or a flap, is able to renew or reproduce the subjacent bone from which it is stripped or raised.

The other principle, which I have called sub-periosteal gouging or scraping, has for its principle, that it is the periosteum, *only when attached* to the bone, that is able to renew it; and that, in consequence, the bone beneath the periosteum should be husbanded and preserved with the very greatest care,

After invoking the aid of the Baconian method of research, M. Sedillot quotes numerous series of experiments which, in his opinion, are sufficient to prove that the periosteal flaps, if completely isolated from the sub-

jacent bone, are unable to reproduce it; "and that the so-called method of sub-periosteal resection is founded on a deplorable illusion;" and gives his opinion that the chief use of preserving the periosteum at all, is to supply a mould for the bony matter which is left in his method of periosteal gouging, and which really reproduces the bone.—*Ed. Med. Journ.*, *Gazette des Hôpitaux*,—*Am. Jour. Med. Sciences.*

Treatment of Croup.—In a memoir addressed to the Academy of Sciences at Paris on the subject of croup, Dr. Abeille sums up his conclusions concerning this disease, as follows:

1st. Croup is only a predominant localization of a general disease, diphtheria, and only in some exceptional cases can it be met with as a local disease.

2d. Local treatment alone is powerless to arrest croup, and can only fulfil an indication, which is, to combat its localization, and in this respect such a mode of treatment is very proper, providing it does not complicate the existing symptoms; such, however, may be the effect of cauterizations of any kind.

3d. Croup often kills by asphyxia; it terminates fatally frequently when there exists a pseudo-membranous affection of the bronchial tubes and lungs, or when there is a general infection of the system, which may in some manner be compared to putrid infection. Tracheotomy, performed solely to prevent the patient dying from asphyxia, while the diphtheritic exudation may disappear spontaneously, or be removed later by local or general treatment, is the practice generally adopted at the present time, but is not justified either by results or scientific deductions. The results officially known during a period of six years and a half at the hospital "Sainte Eugénie," and which should not differ from those of other hospitals during the same lapse of time, show three deaths out of every four patients upon whom tracheotomy was practised. During the time of Rosen, with the treatment which is considered detestable at the present day, the mortality did not exceed a third of the cases operated, and if we add to the cases of croup operated at the "Sainte Eugénie," those receiving medical treatment only, we find a third resulting in death, precisely as during the time of Rosen; that is to say, that, as a general result, tracheotomy has added nothing favorable to the treatment of this disease (Statistics of M. Bourdillat read before the Society of the Hospitals, 26th of July).

4th. It is then positively proved that it is from a medical treatment, capable of combating the disease both in its general and local predominant manifestations, that science should seek to arrest the progress of croup. This treatment, says Dr. Abeille, from our own efforts, which were crowned with success in exceptionally bad cases, and for a stronger reason in cases less serious and relatively benign, may be summed up in the three following propositions, two of which are currently accepted in practice, and the third one, which is of recent introduction, is the inhalation of moist vapors of the sulphide of mercury, a suitable diet, and the free use of emetics.—*Gazette Médicale*, Nos. 37, 38 and 39.

Iodine Inhalation in Diphtheria.—Mr. J. Waring Curran (*Lancet*) extols the inhalation of iodine in diphtheria, and claims for it the property of arresting the development of the membrane. He thus speaks of its employment:

The formula which I employ for inhalation purposes is the same as that formerly used by Sir Charles Scudamore in pulmonary phthisis—viz.: Iodine, iodide of potassium, of each four grains; alcohol, four drachms; water, four ounces. Of this, for each inhalation, commencing, I take a drachm; add to it a pint of vinegar infused with a handful of dried garden sage, placed in a common inhaling jar, steadily increasing the quantity of iodine solution until I arrive at half an ounce each inhalation. The circumstances of the case, the age and strength of the patient, and the severity or mildness of the attack, guide me with regard to the number of inhalations, and the time occupied by each. For an average case, occurring in a healthy patient, I would say twelve inhalations at least per diem, with eight to twelve minutes (an interval allowed to rest) for each. The loss of valuable time in country practice, occasionally, will not permit the delay of sending and waiting for an apparatus; accordingly not unfrequently I have been compelled to make my inhalation in the following manner: Having boiled the vinegar and sage, place it in a teapot with a long spout, and when the patient is prepared to inhale, add the iodine, cover the lid of the vessel with a cloth, keep up the temperature by a spirit-lamp placed underneath, and holding the vessel by the handle, allow the patient to inhale through the spout. Laryngeal irritation is in a great measure prevented by the small quantity at first used, through the patient becoming gradually accustomed to it.

Prompt Action of Turpentine in the Treatment of Tænia Solium. By M. A. McClelland, M.D., Knoxville, Ill.—I was summoned at 4 o'clock P. M., Nov. 19, to see a patient, at the depot, who was in a "fit." Learned from the bystanders that the young man had fallen suddenly forward on his face, and for a few minutes had severe spasms, with frothing at the mouth. In the fall he injured his nose sufficiently to cause considerable hæmorrhage. Found him in a semi-stupor, breathing easily, pupils responding to the light. In a few minutes he recovered sufficiently to inform me that he was very tired, and that he had had these "fits" before. By this time his father had arrived, from whom I learned that the patient was twenty years old, and had been generally healthy—had usually a voracious appetite, and that three years before he had passed a great many worms, and at one time a portion of what was supposed to be a tape-worm six feet long. With this evidence I diagnosed the case "epileptiform convulsions," depending on Tænia. While lying on his back the hæmorrhage from the nose took place into the throat and was swallowed, and, as it was causing the patient to vomit, I deferred treatment till morning. At 6 o'clock A. M., Nov. 20, I began to exhibit tablespoonful doses of ℞ Turpentine ℥jv., Mucilage Gum Acacia ℥ij., Syr. Simp. ℥ij., Ess. Lemon ℥ss., every half hour. At 9 o'clock A. M. saw the patient, who was tolerating the medicine well, and ordered two tablespoonfuls at a dose. The patient, on his own responsibility, made it three. At half-past 10 A. M., he came marching, highly elated, to the office with the parasite carefully wrapped up in a paper. The worm came *en masse*. Did not learn from patient whether it showed signs of life or not. The neck of the worm was tied in several knots, which I feared to undo lest I should break it. Measured carefully it gave nine feet, which, with the six feet passed three years before, gave an aggregate of fifteen feet, which is the average length. The bowels had been constipated for a long time. The emulsion caused active catharsis, and with a rapidity my experience would not have led me to anticipate. The above case exemplifies the therapeutic value of Turpentine, given in large doses, in the treatment of Tænia. The only ill effect has been a moderate strangury, which is readily yielding to flax-seed tea.

Poisoning by Sumach.—Dr. Braman (*Med. and Surg. Reporter*) recommends local application of dry calomel or citrine ointment not only for sumach but ivy poisoning.

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, January 15, 1868.

SPECIALISM AND GENERAL MEDICINE.

THERE is no doubting the fact that the study of special branches, as now carried on, is rapidly enlarging the domain of medicine. The specialists, so called, despite any prejudices that may exist in the minds of the general practitioner concerning temptations to magnify the claims of respective departments, must be considered as benefactors of their craft. As such they should deserve the thanks of every one who is a friend to science and an advocate for progress. All who have watched the advances which specialism has made, and have noted the number of able men who have been coaxed into special studies, must admit that its claims to respectable recognition are pretty well established. There have been very few who would be willing to deny any good results which might grow out of the study of a specialty: the difficulty, however, has been to settle upon the proper relations which should be maintained between specialism proper and general practice. We are well aware that extreme sides have been taken on this point, and that the present unsettled state of the question has been the natural result. The general conviction which forces itself upon every one who has examined into the respective merits of the case is that the whole difficulty rests upon the want of a proper understanding between the two parties. The subject, viewed in the broad light of common sense, admits of an examination, the results of which can be mutually satisfactory.

The respective positions of general practitioner and specialist are, in truth, very different from each other. The former is the proper medium of communication between the people and the profession; while the latter is, strictly speaking, separated from the people by the profession. To the practising physician the general public naturally look as the only one who is supposed to be acquainted with their ailments, and who is able to give suitable advice. The specialist, however, depends almost solely for patronage upon the recommendation of his brother; he dares not, unless he wishes to dishonor himself and his calling, bring himself and his qualifications more directly to the notice of his patients. He is forced to throw himself wholly on the generosity of his endorser, and it is of the utmost importance that his delicate position should be properly appreciated by all parties concerned. A specialist becomes such after a very long and patient study of a particular branch in medicine, and if at the end he is not privileged to enjoy the fruits of his labors by the generous countenance of his confrères it is an injustice not only to him but to the science of medicine at large. We are, perhaps, ready to say that the specialist is an extremist, that he is one of a class who see only one subject for study, and that his habits of thought will not allow him to travel outside of the path which he has marked out. Although this may be true of some, it is by no means the case with the majority; the true specialist, to our mind, is one who is well enough grounded in the general principles of medicine to guard him against such an error. The determination to unravel difficult problems and to work properly in a good cause is manifest in most of his doings; and even though we are ever ready to condemn transcendentalism, we should be equally generous to overlook its commission in the surety that in it are buried many important, valuable, and indispensable truths, which otherwise would never have been elaborated.

The specialist differs from the ordinary physician in that he has prepared himself from practice in the most difficult cases that may occur in a particular branch. This difference is becoming more and more appreciable as the study of specialties is advancing and enlarging its area. It is preposterous for any one to suppose, however powerful may be his intellect, however apt at gaining information, however skilful as a manipulator, that he can be a specialist in every branch. Even the most obstinate opposer of specialism will not be prepared to allow the possibility of such a state of things. Some men, it is true, have made an approach toward the accomplishment of such an end, but it has, after all, been only an approach. We are not only forced to acknowledge the benefits of specialism in theory, but the general practitioner must apply the theory to practice; he must not only admit that specialism is necessary to the advance of our knowledge in different directions, but must be prepared to support those who labor in the cause of its advancement. This he can very well do by taking an honest view of the position of things, and can thereby advance both his own and his brother's interest.

We are not as yet inclined to draw a line of rigid distinction between the two classes of practitioners, but are convinced that the time is not far distant when the necessities of such a course will be apparent to the most conservative. At present we are in just this position, and should be prepared to act in accordance with its demands:—The general practitioner, if he desires to be a type of his class, a model family physician, so to speak, can hardly expect to be much of a specialist in any department except, perhaps, midwifery. He must take the pains to fit himself for all the ordinary cases that may come to him; and these, we may say

in passing, are sufficiently numerous and important to engross all his thoughts and direct all his energies. He can certainly make himself as useful in such a line of duty, and accomplish as much good as can the specialist, who has a smaller and perhaps more cultivated field to work in. General medicine overlaps specialism sufficiently far to gratify the ambition of any ordinary conscientious practitioner. This common ground, so to speak, embraces the elementary departments of all specialties, and is as much the province of one class as the other. While the specialist is expected to be thoroughly grounded in the elementary as well as the more advanced part of his branch, the physician must know how far he dare go in the treatment of any of the organs now specially studied without the aid and advice of an expert. His position, after all, is the most enviable of the two; he has more variety in his practice, has an opportunity, to a certain extent, to avail himself of the various new ideas which are presented to him, and to choose the most eminent men in all special departments for counsel. An enthusiastic specialist has likened the profession generally to the rank and file, while he pleases to call the experts the leaders. Can we not, however, for the sake of an illustration of our idea, turn the tables? If we begged to differ with him in his particular view of the case, we would liken the practitioner proper to the general who, when he is about to fight a battle, calls around him his staff, counsels with them, and combines the views of all in a plan of his own.

The report of the case of extirpation of the uterus, by Dr. Hackenberg, in the present number, will be of interest to our readers, not only in itself, but as the representative of a class of very important, severe, difficult, and fatal operations. The uterus was first removed during life through the abdominal walls, twenty-one years ago, and up to Sept., 1865, forty-two cases have been recorded, with eight cures. Since that time the list of operations has been increased by six; one by Wood, of Cincinnati, one by Sands, and one by Krackowizer, of this city, the one in the present issue, one by Atlee, reported at a recent meeting of the N. Y. Pathological Society by Dr. E. Delafield, and one which has not yet been published, by Weber, of Cleveland. All of these latter terminated disastrously, so that the ratio of good results has decreased from eight in forty-two to eight in forty-eight. This is indeed a frightful mortality, and, when we compare the results with its sister operation, ovariotomy, there is, surgically speaking, a wide gap between them.

The lesson which every practitioner should be willing to learn from Dr. Hackenberg's case is that which relates to the necessity of a correct diagnosis to begin with. The mistake which is so candidly stated has not been committed by him alone, but by many others who have preceded him. Indeed, the majority of the operations which have been performed have been based upon just such an error. It is not likely that the same thing will occur again with the same individual, but then experience should be a wholesome warning to others to "make assurance doubly sure" before trusting the patient to the meagre chances of success which the operation offers.

We would take occasion to state that the delay in the appearance of our last number was unavoidably occasioned by the issue of an extraordinarily large edition.

Reviews and Notices of Books.

Synopsis of the Course of Lectures on Materia Medica and Pharmacy, delivered in the University of Pennsylvania, with Five Lectures on the Modus Operandi of Medicines. By Joseph Carson, M.D. Fourth edition, revised. Phila.: H. C. Lea. 1867. Pp. 272.

As the title of this little work indicates, it is a mere synopsis of a course of lectures on materia medica, delivered at the University of Pennsylvania, and is calculated almost solely for the use of the students of that institution. As such it doubtless subserves its purpose, but there are too many points referred to in the text, which require elucidation in the lecture-room, to recommend it to the students of medicine generally. There are, however, contained in the work five excellent lectures on the modus operandi of medicines, which, by themselves, cannot be excelled for systematic arrangement and sound reasoning.

A Dictionary of Medical Terminology, Dental Surgery, and the Collateral Sciences, by Chapin A. Harris, M.D., D.D.S., Professor of the Principles of Dental Surgery in the Baltimore Medical College, etc. Third edition. Carefully revised and enlarged by Ferdinand J. S. Gorgas, M.D., D.D.S., Prof. of Dental Surgery in the Baltimore College, and Vice-President of the Association of the Colleges of Dentistry. Phila.: Lindsay & Blakiston, 1867. 8vo, pp. 743.

Owing to the much lamented death of Prof. Harris, his dictionary did not advance to a new edition as rapidly as the requirements of the case demanded. The many advances in dental science, which have been made during the past few years, have rendered the incorporation of many new terms and formulæ absolutely necessary to the student of dentistry, as well as to the dental practitioner, and they especially will be gratified to learn that the task of the present editor has been conscientiously and satisfactorily performed. Nearly three thousand new words have been incorporated into this edition, besides additions and corrections to many others. A noticeable feature of the present edition is the mention of the doses of the more prominent medicinal substances. As a work for reference to those studying or practising dentistry, it is in our opinion invaluable. The arrangement and concise treatment are everything that can be desired, and the work as a whole is what its title indicates. It is beautifully printed, and, as far as we can be able to say from a cursory review of its contents, free from typographical errors.

Photographs of Skin Diseases, taken from Life, under the Superintendence of Howard F. Damon, A.M., M.D., Fellow of Mass. Medical Society, etc., etc., etc. Boston: 1867.

We are always interested in every attempt to elucidate, and thus facilitate the study of any branch of disease, and more especially of one which is too often so dis-

couraging to the busy practitioner as that of cutaneous diseases; and therefore welcome this enterprise of Dr. Damon, the first ever attempted in our country, to press photography into this service. Colored photographs and chromo-lithographs have already been used for this purpose; but they fail in giving a correct idea of these affections, unless made too expensive for the student. Dr. Damon, therefore, leaves his plates uncolored, and is thus able to give a more correct idea of the form, arrangement, etc., of them.

Dr. D. proposes to issue these photographs in four series, each to consist of six illustrations, making twenty-four plates in all; and, if patronized by the profession, to continue them until a complete atlas of these diseases is presented. Two plates are to be issued each month, the series to be completed in about a year. They have been taken by artists employed for the purpose, from selected cases under his observation in dispensary, hospital, and private practice.

The first two plates of this series, which we have received, represent chronic eczema of the hand and herpes zoster, and are fine specimens of art; and we trust that the enterprise will receive the encouragement which it merits.

"EPIDEMIC MENINGITIS OR CEREBRO-SPINAL MENINGITIS." By ALFRED STILLÉ, M.D., Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania, etc., etc. Lindsay & Blakiston, Philadelphia. Pp. 178.

DURING the epidemic of cerebro-spinal meningitis, which has existed in the United States for the past ten or eleven years, so much has appeared in the different medical journals in regard to its nature, treatment, etc., that there seems little space for anything very new. In accordance with this, the present work seems rather a resumé of what has been said. It contains nothing particularly new; but the observations and opinions of many different writers *are brought together, compared, and criticised.* The present work is well suited *for those who are anxious to find in one book all that has been said on the subject,* while its complete bibliography shows the more curious reader where to look for more minute information.

The authors consulted are American, English, Irish, French, German, etc.; and reference is made to about all of the epidemics that have been reported. In some places the author seems to have adopted German ideas, and along with them a German mode of expression. But this would only be another instance of the difficulty of separating the two; when an idea has been fully developed in German, it seems to rebel against being clad in pure English.

The symptoms furnished by the nervous system, organs of the senses, digestive organs, urinary organs, pulse, skin, etc., are separately considered. And we are very happy to see the explanation of the *causes* of so many of the different symptoms given. In many medical works we find a bare enumeration of headache, deafness, constipation, etc., which symptoms taken together are said to form a disease. But no explanation is given *why* the symptoms arise. After reading over the list, we must carefully study out for ourselves each component of the disease. It is so generally considered the duty of the physician to treat *symptoms* that it becomes important for him to know *how* to do so. This knowledge can only be certainly acquired by becoming acquainted with the cause. For instance, while in scarlatina the deafness will depend on the throat-trouble or an extension of it, in cerebro-spinal meningitis "this symptom appears to depend chiefly upon the pressure of the plastic exudation in which the auditory nerves are embedded." Of course if treatment were directed to this symptom, it would necessarily be different in the two cases.

Until the immediate causes of all the symptoms of a disease are known, we cannot expect to know its *ultimate* cause.

The cause of cerebro-spinal meningitis appears involved in as great obscurity as ever. It seems determined that it is *not contagious.* But while this negative point is settled, there seems to be nothing new on the positive side of the question.

After discussing the positive diagnosis, the comparative diagnosis between this disease and hysteria, typhoid and typhus fevers, is extensively argued.

The article on treatment we regard as very practical and sound; ice to the scalp during the continuance of pain in the head, blisters to the scalp and nape of the neck are recommended. Alcoholic stimulants are not to be used until required. Opium is highly spoken of: "Among the symptoms which it was particularly intended to relieve, was one which is usually thought to be increased by narcotics, viz., coma." Quinine is considered as being only useful as a tonic. The benefit of mercury is doubted.

This essay is very interesting, as containing all that is at present known of this very curious disease, and will prove an excellent starting-point for future observations.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

CALLED MEETING, DECEMBER 19, 1867.

DR. HENRY D. BULKLEY, Vice-President, in the Chair.

A NEW METHOD OF TREATING THE OVARIAN STUMP AFTER EXCISION.

DR. HORATIO R. STORER, of Boston, Mass., read a paper upon the above subject, in the course of which he recited the case of a patient, a lady from Columbia, Tenn., from whom he had removed an unilocular cyst of left ovary, in Chelsea, Mass., September 23, 1867. There were present, Mr. T. Spencer Wells, of London, Eng., Drs. Kimball, of Lowell, Lincoln, of Boston, and Wheeler, of Chelsea. The tumor, with its contents—a straw-colored albuminous fluid—weighed forty-three pounds. A portion of the fluid, however, had been allowed to escape through a puncture made by a trocar with a tubing attachment. The pedicle, which was about the size of the thumb, was divided by the scissors, after the application of Dr. Storer's clamp shield.* When the clamp was relaxed, but one artery of moderate size required ligation, which was effected by iron wire. The walls of the primary incision were brought together by twenty iron-wire sutures; the end of the pedicle was brought between the inner lips of the wound at its lower angle, where it was "pocketed." "Pocketing the pedicle," as he (Dr. Storer) proposes to designate it, is effected by passing three of the stitches through the pedicle and both inner edges of the abdominal wound, after which the external edges are brought together. This procedure coaptates the raw surfaces of the wound with the raw surface of the pedicle, while the line of superficial union completely covers over the whole.

The operation was performed during menstruation, to which fact Dr. Storer especially directed attention, as being a deviation from the general practice. This

*For description of this instrument, see *Medical Record*, vol. i, p. 885.

period, he did not think, was necessarily dangerous. Furthermore, the shock of the operation, and the removal of one ovary during menstruation, had no appreciable effect upon the amount of the catamenial discharge. The accepted views of the profession in regard to the essential character of menstruation, he thought required modification. He alluded to a case in which he had successfully removed the uterus and both ovaries,* where there was a sanguineous effusion eighteen days after the operation, and twenty-six after the last catamenia. The lady alluded to, he would state as a matter of some interest, was still in perfect health.

Dr. Storer also gave the details of a case in which both ovaries had been removed, and in which the pedicle had been treated somewhat differently from the usual method. He had, instead of dividing the pedicle, dissected away from the encompassing masses the Fallopian tubes throughout their entire length. The peritoneal wounds were closed by wires, which served the purposes of both ligatures and sutures: five of these being inserted upon one of the tubes, and three upon the other. This patient, who made a very good recovery, has had, since the operation, quite regularly a sanguineous discharge, not referable to any disease of the uterus, and not under the control of any hæmostatic. This, too, in its persistence, is quite different from the hæmorrhagic discharge following hard upon an ovarian section.

Another notable point in the first operation, as related in the paper, consisted in the novel way of treating the stump, in alluding to which Dr. Storer maintained that the knife was objectionable, on account of the hæmorrhage so apt to follow an incised wound, and the liability of a free and fatal flow from the slipping of the ligatures.

The écraseur also had its disadvantages, one of which was, when his clamp shield was not applied, that of dragging in outlying tissues, and thereby increasing the number of divided vessels. Besides, too, a contused wound is apt to give rise to a more profuse suppuration.

The cautery, says Mr. Wells, "would almost certainly fail to stop such large vessels as are frequently met with in a pedicle." Mr. Baker Brown's testimony in its favor is to be received with due allowance. His own method of dissecting the Fallopian tubes away from the diseased mass, as practised in the first related case, has for its recommendation: 1st. No unnecessary division of vessels. 2d. A probable primary union of the cut peritoneal surfaces along the Fallopian tubes. 3d. The avoidance of hæmorrhage; and 4th, the absence of contact between any general peritoneal surface, and any newly divided or suppurative tissue.

In this way the serous lips of a peritoneal wound may be approximated and mechanically made to close the mouths of bleeding vessels. In the case of a long pedicle, the second method is usually practicable. The stump should be "pocketed." When short, or where there is practically none at all, the stump can still be "capped." Metallic sutures are to be preferred. Dr. Storer then took up the topic of subsequent treatment of the stump. He remarked that whether the stump was *intra-mural* or *extra-mural*, there were certain serious dangers to be considered. The *intra-mural* attachment, or "pocketing," was intended to obviate these. Mr. Hutchinson, when he brought the extremity of the pedicle outside of the abdominal wall, lessened the mortality very much, since he decreased the risk of hæmorrhage, of peritonitis, and of a subsequent hæmatocele, from reflux of the catamenia through the divided Fallopian tubes—a frequent accident, liable to end fatally. He allowed that the external method (whether by clamp, pins, or sutures) is, where the pedicle is long enough, far superior to the wholly internal method. But he agreed with Mr. Wells that it was not yet perfect, and quoted from that ovariotomist several objections.

He claimed that by "pocketing" many difficulties were overcome, as for example the most favorable condition for primary union was obtained in that two raw surfaces were brought directly together; hæmorrhage, either primary or secondary, was as easily prevented as when the stump was external; there was no inevitable fœtid discharge from the stump; when there had been a careful adaptation of surfaces, there was slight risk of exciting suppuration in adjacent tissues. The existence of an infra-umbilical uterine outlet for the catamenial flux, and the occurrence of an intra-peritoneal hæmatocele, were rendered impossible, while traction upon, or strangulation of intestine, was quite unlikely to happen.

After an allusion to certain prospective modifications in some of the minor details of the operation, Dr. Storer gave as a reason for his having made the attachment at so high a point, viz.: midway between the umbilicus and the pubes—a desire to provide against any subsequent pregnancy by allowing the uterus to rise to a higher point.

Dr. Storer, during the reading of his paper, remarked *ex tempore* upon Dr. Krackowizer's case of extirpation of the uterus by mistake for ovarian tumor.* He maintained that an absolutely certain diagnosis in that case, as indeed in many other such, was not only nearly but quite impossible of attainment.

Dr. Peaslee said: He was very much interested in the paper read by Dr. Storer, which he considered a progressive one. Dr. Storer's method of treating the pedicle in ovariotomy may also be proved by experience to be the best method. But up to the present time he, Dr. P., thought the best way to treat the pedicle is to tie it with a double silk ligature, passed through its middle—each half of the ligature inclosing half of the pedicle—then to cut the ligature close to the pedicle, and let the latter remain in situ in the abdominal cavity. Thus the abdominal incision may be completely closed at once. He did not mean to say he would adopt this method in every possible case, but he thought it altogether superior to any other of all the methods hitherto used and specified by Dr. Storer. In patients, however, like Dr. Storer's, with a monocystic tumor, without adhesion, and with the other favorable conditions specified, Dr. S. would probably have succeeded in nine cases out of ten, and perhaps nineteen out of twenty, whichsoever of the commonly approved methods of treating the pedicle had been adopted. The operation itself in such cases is facile, and no special care in after treatment is required. On the other hand, cases of polycystic tumors, with extensive adhesions and unfavorable conditions of general health, will too often prove unsuccessful, however the pedicle may be managed.

Still, the management of the pedicle is doubtless an important element of success, or the contrary, in the less desirable cases, and deserves consideration in every instance. He was very positive, too, that the success of ovariotomy had been greater in proportion to the number of cases, when the pedicle had been treated according to the plan recommended by himself. Dr. Tyler Smith, who operates in this way, saved eleven out

* *Medical Record*, vol. i., p. 168.

* Vide *Medical Record*, Sept. 1, 1867, p. 297.

of fourteen patients; while Mr. Bryant* saved only ten out of his first nineteen cases, in which, with four exceptions, the pedicle had been treated by other methods, but of his last seven cases treated in the way he was commending, *all* recovered. The whole number of cases treated thus far in this way is, however, still small, compared with those treated with the clamp, and by the ligature (Clay's method) left hanging out through the abdominal incision—the method he adopted in his first operations, and which he still preferred to all others, except the one he now advised.

It has been objected to the method which he preferred, that a slough of the stump was sure to occur beyond the ligature, and that this decomposed mass, falling into the peritoneal cavity, would become absorbed and produce septicæmia. In corroboration of this view, Dr. Routh's experiment of placing a piece of flesh, while still fresh, in the peritoneal cavity of one of the lower animals is cited; since here, it will be remembered that the flesh underwent decomposition, and produced fever of a low type from absorption of the septic fluid. Mr. Spencer Wells, indeed, suggests on this belief, that the ligatures, if used at all, had better be brought out through the abdominal incision, in order to draw off the decomposed fluid in the peritoneal cavity by capillary attraction.

Now, in reply to this objection, Dr. P. would say:

1st. No symptoms of septicæmia, and no fever of a low type had occurred in the cases treated as he had recommended; which shows that no such sloughing of the pedicle, as is invoked by the opponents of this method, takes place. It may *possibly* occur in exceptional cases; but as a general proposition, he must infer that it does not, and that Dr. Routh's experiment therefore directly favors this method, instead of being opposed to it.

2d. He (Dr. P.) has had *the fact* demonstrated in three cases, in which six ligatures were applied, that no slough of the extremity of the pedicle occurs. Two of the patients died on the seventeenth day, and the third (not his own case) a few days earlier. Of the six masses inclosed, not one had sloughed. All were connected with the adjacent surfaces by an exudation which had maintained their vitality, though some of them were now completely cut off by the ligatures; and neither of the three patients had had any symptoms referable to the pedicle at all.

He knew of no other objection of any weight to the method he proposed.

On the other hand, this procedure admits of a complete and immediate closure of the abdominal incision, which is of course expected to heal by first intention. Besides, the ligature is the surest safeguard against *hæmorrhage* that is known, and the one always adopted when the other methods fail to arrest it. He had seen not a few instances in which the clamp, the actual cautery, the silkworm's intestine, or the silver wire, failed to control the hæmorrhage from the pedicle, and it was necessary to resort to the ligature at last. It seemed to him in all these cases that it would have been quite as wise if it had been used at first, without so much manipulation and loss of time. Any means of arresting hæmorrhage *may* fail; but he had applied, and seen applied, not less than forty ligatures to pedicles without the occurrence of hæmorrhage in a single instance. And in those cases in which the ligature had slipped off of the pedicle, only a single ligature had been passed round the latter, and then the pedicle also had sometimes been cut too close to the ligature.

This is a method also which may be applied to all cases, and is the only one for very short pedicles (unless the cautery or the écraseur be preferred). Of course the method of Dr. Clay is also applicable to all cases; but he supposed that if the ligature is to be used at all, none would prefer to have the ends coming out through the abdominal incision, provided there is no sloughing matter to be brought through in that way, and that the loops remaining behind produce no mischief, as is known to be the fact. Dr. Peaslee had had septicæmia occur in three of his cases, but not from any agency of the pedicle in either instance. These three cases recovered.

On the contrary, Dr. Peaslee regarded the fixing the pedicle in contact with the abdominal walls in any way, whether by sutures or the clamp, or by "pocketing," as proposed by Dr. Storer, as very objectionable. Fortunately this could not be done if the pedicle was very short; but the probability that such an adhesion would interfere with the upward development of a gravid uterus is very great, although parturition has followed in a few such instances. And Mr. Wells has reported a case of death from strangulation of the intestines by the band thus extending across the peritoneal cavity. Why not so manage the pedicle that if the patient survives the operation the recovery is perfect?

Still, ovariotomy is an operation in regard to which, more than any other perhaps, we should guard against exclusive views. Experience will perhaps show that one method of treating the pedicle is better in one class of cases, and another in another class. Meanwhile he adheres to the one as generally best, which he thought had thus far succeeded proportionally better than any other; and which presents, at the same time, certain advantages not secured by the maintenance of the pedicle in contact with the abdominal walls, and avoids the inconveniences also which that method involves. In regard to the other points in ovariotomy also, we must have no preconceived notions on commencing the particular operation; since if uncomplicated it is one of the simplest and easiest of surgical procedures, while in the most difficult cases it is the most formidable operation ever attempted. And with the exception of the class of cases already mentioned as strongly promising success, no one can tell before opening the abdominal cavity what complications he is to meet. The operation, therefore, should always be commenced as an explorative procedure, and with the understanding on the part of the patient and the friends, that it may fail of completion, should complications be found which render its completion the more dangerous course.

In regard to the removal of fibro-cystic tumors of the uterus, Dr. Peaslee remarked that he had not had so much experience as Dr. Storer, and that he had neither been so fortunate nor so unfortunate. He had removed two such tumors, one patient dying in forty-eight hours and the other at the end of a week. The latter, however, died actually of gangrene of the intestines, from hernia through the abdominal incision, produced by violent coughing; the post-mortem showing that she would doubtless have recovered from the operation so far as the uterus and its appendages were concerned.

In regard to the case reported by Dr. Krackowizer of mistake in diagnosis, Dr. Peaslee remarked that he thought no apology was required for it. He (Dr. Peaslee) had once made a similar mistake, after availing himself of the sound and all other recognized methods, he believed, of diagnosis; and he or any one else might do the same again, he thought. No physician ever pretends that he can always distinguish with certainty between two diseases, even when on the surface of the body; and any surgeon who expects always to be able to decide with unerring certainty between two or

* *London Lancet for August*, 1867, p. 513.

more kinds of tumors in the abdominal cavity, will not only sometimes find himself deceived if he pronounces positively, but he will also hold up to non-medical men a standard which they will not be slow to turn to the disadvantage of the profession generally. It is well to understand, and also to admit publicly even, that human diagnosis recognizes such a thing as an impossibility, and always will do so.

Dr. Emmet stated that his experience in ovariotomy had been limited to some half-a-dozen cases. As a matter of safety, he had been unable to make up his mind, in either of these cases, to drop the pedicle back within the abdomen. He had secured the pedicle crowded down in the lower angle of the wound, not with a clamp, but included in the abdominal sutures. In each he had carried out somewhat the same idea as proposed by Dr. Storer, with a view of covering early the stump of the pedicle. That he had been in the habit, after the fourth day, of cutting off the ligature around the stump and gradually removing the sutures, including the pedicle, before the others, so as to draw the edges of the abdominal wall over it. That this plan was a safe one, as the peritoneum united rapidly and firmly after twenty-four hours; as the stump was not entirely strangulated, he had never had any sloughing from the end. He was also convinced, when the pedicle was to be brought out of the lower angle of the wound, that the best plan to be adopted in regard to the incision was to make it as near down to the pubes as possible, that is, so far as was consistent with safety. In his cases no pregnancy had occurred; but he knew of one instance, in Dr. Sims' practice, where the pedicle was included in the lower angle of the abdominal section, and the patient had borne three or four children since without any difficulty, from this plan of treating it.

Dr. Noeggerath, after reviewing the additions to our knowledge of this subject, called attention to the fact that Dr. B. Stilling, of Cassel, was the first to propose (in 1837), the extra-peritoneal adjustment of the pedicle. His method consisted in tying the pedicle *en masse*, and uniting it by pins with the raw surfaces of the abdominal wall, leaving the section above the ligature outside in contact with the air; thus effecting only a partial union between the same and the integuments. Therefore Dr. Storer's manner of treating the pedicle was an original one in principle.

Dr. N. could not with Dr. Peaslee so strongly endorse the intra-peritoneal management of the stump. There were some rather serious objections to its application, among the chief of which was the unreliability of the ligature against the occurrence of hæmorrhage resulting from the shrinking of tissues, which were quite succulent when the ligature was applied. In this case the ligature would of course become loosened and no longer fulfil its office. He recalled a case of his own, upon which he had operated in October, 1866, and in which a double ligature, as tightly drawn as could be, became loosened in a few hours and originated an alarming hæmorrhage.

Another objection to Dr. Peaslee's method consisted in the possibility of the occurrence of sloughing of the stump and septic peritonitis from this cause. This accident could not occur when the cut surface is being surrounded by an exudation of lymph from that part of the peritoneum with which it comes in immediate contact. But in case the pedicle should happen to touch a peritoneal surface of low vitality, owing to continued pressure from the cyst or to repeated attacks of subacute inflammation during an earlier stage of the cystic development, why, then, gangrene is very apt to take place around the portion included within the ligature. How far decomposition *might* go on, Dr. N. had himself seen in one instance, where the tissues not only above but *below* the ligature came away to the extent of some three-fourths of an inch.

To Dr. Storer's enumeration of the different modes of treating the stump, two might be added, which he would proceed to mention. The first of these, adopted by Dr. Koeberle of Strasburg, consisted in severing the pedicle by a small wire écraseur, gradually tightened during a period of several days; after which everything was left in the abdominal cavity. The secretions were then washed out as they occurred.

The second plan was a proposition of Dr. N. himself, and consisted essentially in leading the pedicle through Douglass' space into the vagina, where it was to be secured. Thus being in sight, and out of harm's way, it could be more readily commanded in case of emergency. In recommendation of this, it was to be borne in mind that inflammation as well as lesions following the pelvic section of the peritoneum, seemed to be borne with less danger than those of other peritoneal regions; a fact fully corroborated as well by the general innocuity of perimetritic inflammations as by his own experience, since he had operated at least fourteen times, either by the trocar or the knife, for drawing ovarian cysts through the vagina, without losing a single patient from the effects of traumatic inflammation.

Dr. Peaslee, in reply to Dr. Noeggerath's remark respecting the increased amount of blood in the pedicle after the application of the ligature, and its subsequent diminution, thus producing a shrinking of the pedicle and a loosening, and perhaps the detachment of the ligature,—said he made issue with any one who might make that assertion. On the contrary, there being no further need of blood circulating through the artery of the pedicle, there was very little pressure of blood into the pedicle. So true is this, that in one of S. Wells' cases, there was no bleeding from the pedicle, though he removed the clamp (it produced such violent symptoms from dragging on the uterus) in *four hours* after it had been applied.

In regard to menstruation occurring after both ovaries had been removed, as in the cases quoted by Dr. Storer, Dr. P. would say, that he had removed both ovaries in three cases, and the patients are all now living. Neither of these patients has menstruated since the operation. He has in four cases seen a flow of blood from the vagina for three or four days, and commencing the third or fourth day after the operation. But he considered this as merely a hæmorrhage occurring in consequence of congestion of the uterus from the operation, and hailed it as a good omen, as that congestion was thus spontaneously relieved.

Dr. Storer did not wish to be understood as laying down any invariable rules, even for a given operative procedure, since too many probabilities were to be taken into account. But he did desire to put himself on record as one who was very strongly in favor of preparatory treatment, in the case of *all* abdominal sections, believing it to be much more rational to *prevent* than to *remedy* shock. He would prefer, for instance, to give stimulants before anæsthesia rather than when danger was imminent. So, too, owing to the present accepted practice of preparing the pregnant woman for her ordeal by a proper attention to her constitutional conditions, much suffering was saved, and not a few dangers averted. By preparatory treatment in the cases to which he had just alluded, he desired to be understood as meaning something extending ever a reasonable period of time. He believed, too, that to operate was one thing, but to conduct the case afterward quite another—indeed those who wearily watch

over the case, as he has himself had an opportunity of knowing, are, after all, entitled to the greater share of credit for the successful issue.

In response to the resolution of the Academy, asking for a copy of his paper for publication, Dr. Storer said that the same would appear in the *American Journal of Medical Science*, for January.

Dr. Anderson did not think that this fact would conflict with the resolution.

The resolution prevailed, and the Academy adjourned.

N. Y. MEDICAL JOURNAL ASSOCIATION.

Stated Reunion, Friday, December 6, 1867.

Dr. Gurdon Buck, President, in the Chair.

NEW VIEWS OF PHTHISIS PULMONALIS.

Dr. L. Weber read a resumé upon this subject, introducing it by reference to a monograph by Aug. Hedinger on "The Development of the Doctrine of Phthisis Pulmonalis and Tuberculosis" (Tübingen, 1864). Most of the ancient physicians held, with Galen, that pulmonary phthisis was caused only by a slow inflammatory process leading to ulceration; but a few, following Aretæus, added as a cause nodose indurations (φύματα), by whose softening and suppuration vomicæ were produced. The doctrine of Galen held firm, though not quite undisputed, sway down to the time of Laënnec, whose theory, by its simplicity, at once gained a strong hold upon the professional mind, which it has until very recently maintained. Laënnec identified phthisis and tuberculosis, and considered tubercle a peculiar neoplasm, anatomically demonstrable either as such or in its products, cheesy metamorphosis and vomicæ. From this point of view phthisis was pronounced wholly unmanageable, whether in the way of cure or of prophylaxis; yet Laënnec himself, with Rokitansky and Lebert, was afterwards forced by clinical observation to admit that spontaneous recovery was possible. Broussais, sustained by Andral and Reinhardt, while still acknowledging phthisis and tuberculosis identical, denied that tubercle was a pseudoplasm, and regarded it as the result of a slow inflammation; thus reverting to the position of Galen. An approach to a more satisfactory pathology is to be found in the masterly researches of Virchow, who distinctly separates the neoplasm known as *miliary tubercle* from all the other pathological products commonly grouped together with it as tuberculous. Already we begin to see the fruits of his labors in the admirable manner in which Felix Niemeyer and others have lately handled the subject, and in the results of an improved therapeusis based upon a sound pathology.

Under the *pathology*, Dr. Weber drew attention to the theory of Dr. William Budd (which we have given elsewhere), that tubercle is a true zymotic disease, specific in character, and, like other diseases of this class, is perpetuated only by the law of continuous succession; that the deposits of tubercular matter, which are of the nature of an eruption, either constitute or include the specific poison, and are the means of propagating the disease from person to person; and that there is reason to hope that, by means of proper disinfectants, we may ultimately be able to banish this scourge from the community. This theory is the less likely to find general favor now that the questions, what is tubercle? and what its relation to phthisis? are being so variously answered—experiments on animals tending to show that although tubercle may be reproduced by inoculation, yet there may be caused identical products by other inoculated matters. Opposed to Budd stands the school of Virchow and Niemeyer, which holds that the so-called tuberculous deposits in the lungs are by no means of uniform origin, but may arise from the cheesy metamorphosis of many substances; and that phthisis may originate as well from pneumonic or other deposits, local inflammation, etc., as from miliary tubercle. Of the views of Niemeyer, as given by the reviewer from the papers of Dr. Ott, in the *Berliner Wochenschrift* (Nos. 1–7, 1867), we append a brief summary, referring the reader for their fuller development to a condensed translation of Dr. Ott's work by Dr. W. T. Lusk, in the *New York Medical Journal*, December, 1867. The idea, held since Laënnec, that pulmonary phthisis is due to diathesis only, must be given up, experience having shown that all causes productive of bronchitis or hyperæmia and congestion of the lungs may also lead to it. It may exist in cases where not a tubercle is to be found anywhere in the body, and is then commonly traceable to some form of pneumonia—most frequently the chronic catarrhal. But direct irritation from foreign bodies, and especially from coagulated blood retained in the bronchi and alveoli after hæmoptysis, may have been the starting-point—this leading to pneumonia, with cheesy metamorphosis of the pneumonic foci, and this again to phthisis.

In his *diagnosis* Niemeyer distinguishes: 1. cases of phthisis dependent upon pneumonic processes; 2. those of phthisis with complicating tuberculosis; and 3. those of primary tuberculosis. In all these classes there is increased frequency of respiration, but in the purely tuberculous form this will be unaccompanied by dulness on percussion and bronchial breathing. The duration of the cough and catarrh, whether long preceding the fever and emaciation or from the first associated with them, is of great import, the former pointing to a pneumonic process, the latter to a tuberculous. The character of the sputa may indicate much; and a phthisical patient whose expectoration shows extensive destruction of lung-tissue, may be in less danger than another who, feverish, weak, and pale, coughs up only tough, transparent mucus. Fever is a constant symptom of both the pneumonic and the tuberculous forms, and the thermometer is as indispensable a guide in this as in other febrile affections. In the pneumonic forms the remissions are more marked than in those complicated with tubercle or primarily dependent upon it. Attention to the character of the fever, in conjunction with the physical signs, will enable us to determine whether the disease is pursuing the comparatively innocent course of chronic pneumonia and its sequelæ, whether a fresh inflammatory process is being set up, or whether the very grave complication of true tuberculosis has supervened. Chiefly to the fever are due the impoverishment of the blood and the loss of flesh, and the knowledge of this should greatly influence our treatment.

The *treatment* can be much more understandingly and hopefully pursued when we know that it is, in most cases, not with a true neoplasm, but with pneumonic processes, that we have to contend. Where genuine tubercle is present, the case is hopeless, and we can only aim at palliation. Persons with a tendency to either phthisis or scrofulosis demand the best hygienic conditions, and of these the most indispensable is plenty of fresh air. To secure this, residence in a warm climate during winter may be advisable. The diet must be abundant and nutritious, and rich either in fat or in fat-producing elements. Among these the malt extracts may well replace cod-liver oil where that is found nauseous. Sweet grapes have commonly a happy effect. The patient should be warmly clad in flannel. At the onset of an acute alveolar catarrh he should be

sent to bed, avoid superfluous coughing and talking, have his chest covered with poultices, and, if pleuritic pains persist, have leeches or cups applied. This simple treatment will save many a man from the establishment of a confirmed phthisical affection; and will often surprisingly arrest, in chronic cases, an exacerbation of the disease, shown by increase of the fever. Should these means fail, resort may be had to antiphlogistics, of which a favorite with the author is a pill of quiniæ sulph. (gr. 1), digitalis (gr. ss.), and ext. opii (gr. one-quarter), four times daily.

Other modes of treatment, which have lately been recommended from various sources, were next passed in review; and the paper closed with an account of the experiments of Lebert, Wyss, Villemin, and others, upon the inoculation of tubercle and other neoplastic and inflammatory matters from man to animals. The first positive results were reported by Villemin, who, in a communication to the Paris Academy of Medicine, December 4, 1865, and again November 15, 1866, gave his opinion that tubercle is inoculable and specific. But the greatest value attaches to the experiments of Lebert and Wyss, which are the most numerous (the details of forty-five are published), and bear the closest scrutiny. The summary of Lebert's conclusions is given in his own words: "Should we be asked, Have you produced genuine tubercle by inoculation? we should answer by a counter-question: What is genuine tubercle? what have we inoculated? where will you draw the line of demarcation between inflammatory product and tubercle, as it appears, aside from the lungs, in the peritoneum, pleura, adventitia of arteries, blood-vessels of the liver, connective tissue, etc.? With us, inflammation exercises a predominating influence over the whole doctrine of tuberculosis—a kind of inflammation which will develop itself the more rapidly, the poorer and less favorable we find the general nutrition of the body and its tissues, and the greater the absorption of pathological products and degenerated matter which has taken place in addition to it. The gray tubercle neither shows a specific cell nor even does it belong to a peculiar type of cells, and the same must be said of the pathological products of our experiments; by which, as well as by the nature of so-called true tubercle, it is shown that they stand very near to the inflammatory processes—nay, are most likely the products of inflammation."

The paper being before the meeting for discussion,

Dr. Noyes remarked, in connection with the pathology of tuberculosis, that until quite recently the tissues of the eye had been supposed free from liability to tubercular deposit; but lately, in several instances, miliary tubercle had been detected, during life, in the choroid—doubtless in the walls of its blood-vessels. Dr. Delafield had a specimen from the dead-house illustrating this. Dr. Noyes desired to hear the views of Professor Flint upon the subject of the paper.

Dr. Flint was not prepared for an elaborate discussion of the subject, but would touch upon a few points. While we should receive with great respect the opinions of a writer so justly distinguished as Niemeyer, yet conclusions so radical, tending completely to overturn the views long held by pathologists, should not be hastily adopted. Many of them, indeed, seem in conflict with clinical experience. Confining the term tubercle to the miliary form alone, and considering the deposits ordinarily called tuberculous as the products of chronic pneumonia, Niemeyer attributes this chronic pneumonia to an antecedent bronchitis, gradually extending to the alveoli. Now nothing is more common than to see a patient rather suddenly developing marked evidence of tubercle, where previous observation has failed to discover any sign of pulmonary inflammation. Again, nothing can be more certain than that bronchitis (as we apply the term, to bilateral inflammation of the bronchi) has no tendency to eventuate in tubercle; and moreover, a tuberculous patient contracting bronchitis experiences, as a rule, no aggravation of the tuberculosis. The doctrine that hyperæmia of the lungs is a frequent cause of tubercle, contradicts experience. In mitral lesions the mechanical conditions necessitate such hyperæmia, yet it may be considered well established that persons with these lesions are less subject than others to pulmonary tuberculosis.

Dr. Elsberg felt that the Society was indebted to Dr. Weber for presenting the views of Niemeyer; which well deserve our study, as being almost the only attempt to establish upon a scientific basis, of both clinical observation and post-mortem examinations, the doctrine which down to the time of Laënnec had been the prevailing one, and whose strong hold upon the popular mind was still to be seen. The recognized superiority of Laënnec's methods of diagnosis had greatly contributed to give an influence to his pathology of which we could hardly divest ourselves. But its inconsistencies must be acknowledged at least as great, and its failure to meet the facts of clinical experience as glaring, as could be charged upon the theory of Niemeyer; while its uniformly grave prognosis could not but affect unfavorably our therapeutic efforts.

Dr. Whitehead commented at some length upon various means of treatment. He thought that the use of iron and sulphur should be very guarded, as likely to increase the fever. The influence of climate was undeniable, but might be greatly modified by hygienic measures. Sea voyages were in general more harmful than beneficial. Muscular inertia must be regarded as favoring the development of the disease; hence exercise was an important prophylactic.

Dr. Herzog explained what he deemed a misapprehension of some of Niemeyer's views; and wished to call attention to the illustration they had received from the labors of Professor Buhl, one of the ablest observers in Europe. Buhl's conclusions are, that although miliary tubercle is to be distinguished from the direct results of pulmonary congestion and of bronchitic and pneumonic processes, yet these often bear a causative relation to it. The inflammatory exudation, by its mechanical pressure, so interferes with the nutrition of the tissues as to give rise to those forms of degeneration which may result directly in phthisis and secondarily in the production of true tubercle. With the pulmonary infiltration is almost uniformly associated a similar condition of the mesenteric glands, which again seems to have its influence upon the development of tuberculosis. Dr. Herzog spoke of the impossibility of diagnosing simple miliary tubercle by the physical signs, and of the importance, in this regard, of attention to the form of the accompanying fever, as pointed out by Niemeyer.

An animated discussion ensued among Drs. Flint, Lusk, Elsberg, Herzog, Weber, and Post, in the course of which Dr. Flint remarked that while Niemeyer regards tubercle as resulting, in a considerable number of cases, from the irritation of coägula left after hæmoptysis, experience has conclusively established that those cases of phthisis attended by hæmoptysis are the ones which generally pursue the most favorable course.—Dr. Post strongly endorsed this view, and related the case of a patient who had been subject to frequent and profuse hæmorrhages for thirty years.—Dr. Lusk understood Niemeyer that hæmoptysis might cause phthisis, which was amenable to treatment, but not true tubercle.—Dr. Herzog and Dr. Weber explained that it was active hæmorrhage, from excitement, exertion, etc., which, oc-

curring in a lung previously considered sound, might, by the direct irritation of the coagula as foreign bodies, give rise to abscess or chronic pneumonia; and these to phthisis. Dr. Herzog could understand how hæmorrhage occurring in the course of the disease, from the breaking down of the infiltrated tissues, might, by relieving the vessels from pressure, so affect the circulation as to cause improvement in the patient's condition. But he thought it might lead to results either immediately fatal, or remotely so from the formation of abscesses, etc.

Dr. Elsberg desired Dr. Flint's views upon the doctrine of the specific nature of tubercle, as propounded by Laënnec, and still generally accepted.

Dr. Flint replied that some of Laënnec's ideas were exploded, as that "crude" tubercle (miliary granulations) always precedes and constitutes the "seeds" of tubercle as commonly understood. But on the point in question he must incline to the affirmative side. We have here a disease of a specific character, and doubtless dependent upon a specific diathesis; differing widely from acute pneumonia in its manifestations, aud in many respects also from chronic pneumonia. Acute pneumonia commonly attacks the lower lobes of the lungs, tubercle the apices; pneumonia, both acute and chronic, is commonly unilateral, tubercle bilateral. The formation of abscesses in tuberculosis is exceedingly rare.

Stated Reunion, Friday, December 13, 1867.

Dr. A. C. Post in the Chair.

A NEW INSTRUMENT FOR ARTERIAL COMPRESSION.

Dr. Van Gieson read a paper entitled, "A New Method of Arterial Compression by Means of a Sectional Ligature." After a resumé of the more recent modes employed for the complete or partial occlusion of arteries, he described an invention of his own, designed to effect either of these objects, and applicable more particularly to arteries in their continuity, as in the treatment of aneurism. The apparatus, as exhibited, consists of two small silver tubes, each having a shoulder near one end, and a slight curve at the other. The size of the curve should correspond with that of the artery to be operated upon, so that when the two curved extremities are passed down upon opposite sides of the vessel, they may together embrace it below. A piece of wire and a wedge of cork complete the instrument. To apply it, the artery having been exposed and the wire passed beneath it by an aneurism needle, a tube is slipped over either end of the wire, until the two curved ends meet beneath the artery; the opposite ends, remaining outside the wound, are then approximated until the desired degree of compression is attained, when they are fixed in position by placing the wedge between them, and winding the free extremities of the wire around the shoulders. The apparatus is made immovable by adhesive strips, or by a strap fastened about the limb, and provided with a clamp for the purpose. In place of the cork wedge, the doctor proposed to graduate the pressure by means of a spiral spring and a screw. The wire does not touch the artery after the tubes are applied, and in removal it may be drawn out while the tubes are held in situ, to avoid the chance of laceration. The inventor claimed for his instrument facility of application and removal, and ease of graduating the compression. He gave the details of two experiments with it, and desired to see it further tested.

Dr. Wm. B. Lewis next read a carefully condensed resumé of what has lately appeared in medical literature upon "The Pathology of the Urinary Organs, and of their Secretion." Some discussion followed upon the propriety of incising or puncturing the integument, for the relief of anasarca in Bright's disease. Dr. Van Gieson related a case of incision, resulting in severe erysipelas. Dr. Sayre was always accustomed to make numerous small punctures with a tenotome, which rapidly drained away the fluid, and rarely, if ever, gave rise to erysipelas.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Nov. 27, 1867.

Dr. B. H. Sands, President, in the Chair.

VALUABLE EXPERIMENTS ON LIGATION OF ARTERIES.

Dr. Benj. Howard presented a series of specimens, stating, that as he had six recent cases to exhibit, he would in description confine himself to the chief points in the respective cases, and would endeavor to avoid a repetition of anything expressed upon the same subject upon a previous occasion.

The history of the first specimen I present, marked No. 5, is as follows:—Desirous of observing the result of a simple apposition of the internal coats of an artery, I prepared a band of lead, about a line in width, smoothed all sharp edges, and polished it brightly; its length was such that when doubled upon itself, it sufficiently exceeded the diameter of the artery as to allow of its being passed around the vessel, and the two ends clamped together, without any mechanical injury to the coats of the vessel. I applied this ligature in the manner described, to the right common carotid artery of a sheep, on the 17th of October. On the 23d of November, being thirty-seven days after the operation, I made an incision in the line of the cicatrix, which was well healed, when I found close beneath the surface, the ligature in a state of dryness, and waiting to drop from the cicatrix. The deposit of fibrine is seen to have been quite extensive, forming a solid mass from the artery to the integument. Through the whole extent of this will be observed a sinus communicating with the place where the ligature was found, and the point of its application.

The longitudinal section of the artery shows that the occlusion of the artery by fibrine at the point of ligation, and by a well-formed plug above and below it, is perfect. The ligature appears to contain in its embrace, the part of the artery it was made to include.

No. 6.—October 17. I applied to the right common carotid of another sheep a lead-wire ligature, tying it loosely, diminishing calibre about two-thirds. November 22d, being thirty-six days after, I found this cicatrix healed, but at about its middle a small fluctuating tumor. On making an incision through it along the line of cicatrix, the tumor was found to contain about a drachm of very thick pus, in which I found the ligature. The deposit of fibrine will be seen to be greater in this than in the last specimen; and through its whole extent, from its point of application to the abscess, the ligature had ulcerated its way. It is very interesting to observe the plug of fibrine which is clearly shown in situ, by which the whole rear track of the ligature has been closed up as it advanced toward the integument.

The longitudinal section shows, as do others, that at the point of ligation, for the portion of artery destroyed by the ligature, is substituted a solid mass of fibrine, and that the artery is thus perfectly occluded, as well as by a clot above and below.

No. 10.—October 31. To the right carotid of a sheep I applied a flat silk ligature outside its sheath, diminishing the calibre of the artery barely one-half. November 23d, being twenty-three days after, I found the cicatrix soundly healed, the fibrous deposit smaller than

in either of the two preceding cases; and you will observe that the longitudinal section of the artery reveals the same dense fibrine substituted for the canal of the artery at the point of ligation.

There is no sinus or trace of the ligature visible in this specimen, as there was in the other cases. But we know it did escape, because it was found outside the wound, the free end having been fastened there at the time of ligation.

No. 7.—My object in the case now before us, was to observe the effect upon an artery of a simple cessation of function. Accordingly, October 31st, I applied three silver-wire ligatures, the second being about twelve lines above the first, and the third about four lines above the second.

The first was tied with little less than the average tightness commonly used in the silk ligature; the second broke close to the loop, so that I had but to cut off the free end; the third I tied with firmness, but with more caution, to avoid repetition of the accident incident to the second; twenty-two days after I vivisected this specimen, the cicatrix was not firm, and the hæmorrhage was great. It will be seen that the calibre of the arterial canal, between the ligatures, is very much diminished, and is occupied toward its centre by what appears to be an organized clot, which, as we approach the points of ligation on either hand, becomes a firm plug of fibrine.

The history of the disused artery is, however, of but small importance, compared with that of the ligatures as here observed.

The first ligature cannot be found. The second is also wanting; and from the original site of each throughout the fibrinous mass, toward the cicatrix, you will observe an open sinus through which they have been discharged. The third ligature, applied with less force, will be seen lying loosely within the artery at the internal end of the upper sinus, apparently waiting to be extruded. The occlusion about each ligated point is complete.

No. 9.—This is the right carotid of a sheep which I ligated October 31. The ligature was of silver wire, the same as that used in the last specimen exhibited. I tied it by a single flat knot, and cut off the ends closely. I applied it outside the sheath, tying loosely, and diminishing the calibre of the artery about half or two-thirds.

November 23d, being twenty-three days after the operation, I found the cicatrix quite sound. The vivisection was accompanied with very little hæmorrhage, and here is the specimen. There is but little deposition of fibrine, and a longitudinal section of the artery reveals the ligature in situ, as applied; the looseness of its application being manifest by the size of the piece of whalebone passed through its loop. It will be seen there is no sign of suppuration or sloughing, but only the deposition of fibrine for the envelopment of the ligature, and that due to inflammation following the laceration of the areolar tissue in the performance of the operation.

Here is a specimen exhibiting the difference between the effect of the "surgeon's" or flat knot and the ordinary knot, upon the internal and middle coats.

In neither case are the divided edges of the inner coats in apposition; in the former case you will observe, by means of the lens which I will pass around with it, that the divided ends are curled upward, their flat surfaces forming a plane representing the diameter of the artery, at right angles with its long axis; they are therefore not in apposition with each other, but only in juxtaposition.

The ordinary round knot, you will see, has produced a puckering and partial laceration of the inner coats, the plications terminating like radii in the centre of the transverse section exhibited.

The specimens presented exhibit in each case where a loose ligature has been used, whether of silver, lead, or silk, perfect occlusion of the arterial canal.

When the loose ligature has consisted of lead or of silk, ulceration and suppuration have occurred, with extrusion of the ligature toward the surface.

Equally with other specimens previously presented, these exhibit that *every* TIGHT *ligature of either kind, and every* LOOSE *ligature except the* SILVER, *has been extruded; but the "loose silver ligature" is followed by obliteration, fibrinous and extensive, with exemption from sloughing, from suppuration, and from extrusion of ligature common to every case of other kinds exhibited.*

Here are the facts, as far as they go. The theory which after a sufficient accumulation may be woven out of them, may be worthy the consideration of the Society. As to the causes of the differences in the results, I may be allowed to suggest that the questions in order might be:

1st. *The ligature.*—What relation exists between the different qualities of the different ligatures, and the difference in the results exhibited respectively?

2d. *Looseness.*—In the absence of sudden lesion of the artery, and of sudden complete strangulation of the vasa vasorum, are not the parts better able to perform the new task suggested and assigned to them?

Is not the operation, the shock, the local and general disturbance more moderate, than in the case of a tight ligature?

Is not the gradual accommodation of the collateral branches to the demand instituted on the application of a loose ligature, sufficient to account for the absence of the great oozing common only to all the vivisections made in the region of a recent *tight* ligation?

POST-MORTEM DIGESTION OF THE STOMACH, ETC.

DR. LEWIS SMITH presented specimens of stomach, and remarked upon them as follows: At a recent meeting of this Society, I presented a lung which seemed to be gangrenous. The patient from whom it was taken was a foundling, who died at about the age of one month. It will be recollected that the posterior part of each lung in this specimen presented a dark gray color, and was very much softened. The finger readily penetrated it, and in places the lung was so decomposed as to be almost diffluent. Other portions of the lungs and the other viscera had undergone no perceptible alteration. I was not present at the post-mortem examination in this case, but Dr. Gouinlock, of the house staff of Charity Hospital, who made the post-mortem examination, states that it was made about twelve hours after death.

I present, this evening, two other specimens, one which I have preserved since the commencement of the year, the other obtained at a recent post-mortem examination. The infants from whom these lungs were taken, were also foundlings, dying when a few months old, in a state of exhaustion.

I have, from time to time, met with such specimens, probably as many as ten, in the course of six or eight years. I had been led to regard these lungs as probably gangrenous, chiefly by exclusion; for I could not see what else the state could be. At the close of the meeting referred to, however, a gentleman not a member of the Society, a foreigner, suggested that what resembled so closely gangrene in its gross appearance, might be the result of post-mortem digestion. I was sure that there had been no escape of the gastric juice directly into the pleural cavity, but the explanation offered was that it passed up the œsophagus and down

the trachea and bronchial tubes to the lungs, by the movements to which the body was subjected in carrying it to the dead-house.

The reasons for believing these lungs gangrenous are mainly those afforded by the appearance. Rilliet and Barthez, who have written exhaustively on this disease, state that in nearly all cases which they have met, the patients were exhausted by previous disease. The gangrene was secondary. As regards the etiology, therefore, these cases would correspond with those observed by Rilliet and Barthez, for these foundlings were in a reduced state.

On the other hand, as reasons for considering these lungs not gangrenous, may be stated the fact, that they did not have the fetid odor, nor was the breath of these children fetid. The authors, however, from whom I have quoted, state that fetor of breath is not usually present in cases of gangrene of the lung in children. They observed it in only five cases in sixteen, and in only three was it marked (*très fétide*). It would seem, also, that the lungs which I have presented could not be gangrenous, since it is improbable that I could meet as many as ten specimens of gangrene in six or eight years, and all under the age of one year, when Rilliet and Barthez only observed sixteen, all over the age of two and a half years. Again, the affected portions were not surrounded by solidified or inflamed tissue, as they ordinarily are in gangrene.

In order to determine what the effect of the gastric juice would be on the lungs, I removed the stomach and its contents from an infant about twelve hours after death, and placed it in one of the pleural cavities. It was opened so as to allow a more ready escape of the gastric juice. The stomach, with its contents, was also added from another child, and incisions were made in the lung, so as to facilitate the action of the gastric juice. After twenty-four hours the lung was examined, and the result was negative. There was only a slight yellowish staining of the lung. Dr. Gouinlock, of the house staff of Charity Hospital, repeated the experiment, with also a negative result.

While these experiments were being made, we examined the body of an infant who died of entero-colitis, at the age of about six months. The evidences of inflammation of the colon were very decided. The coats of the stomach were softened throughout their whole extent, so as to be easily torn, but were not perforated, although the mucous membrane seemed to be almost wholly dissolved, so as to present a gelatinous appearance. The stomach had a brown color, and was perhaps half filled with contents of the usual appearance. The surface of the left lobe of the liver adjacent to the stomach presented the same brown color, which was superficial, as did also the part of the diaphragm which lies over the stomach, and also the surface of the left lung contiguous to the diaphragm. This part of the diaphragm was also softened. On opening the œsophagus, it was found of a brownish or leaden color, from the cardiac orifice to the distance up the tube of about two and a half inches. There were several small ulcers, apparently involving only the mucous membrane in this part of the œsophagus, while the upper portion of this tube was healthy. On one side, all the coats of the œsophagus presented the same appearance, and seemed somewhat softened, but without perforation, and the surface of the lung, which lay against the œsophagus, was also browned, and apparently eroded to the depth of one or two lines. There had evidently been a transudation of liquid through the coats of the œsophagus, as well as those of the stomach.

The color of the lung produced by the transudation was somewhat like that of the specimens which I have presented, but not so dark. These observations evidently do not indicate positively the nature of the change presented by the lungs which I have presented. The negative result of the experiments proves nothing, because we know that post-mortem digestion does sometimes destroy tissues. I have myself seen the œsophagus severed from the stomach, by this digestion, in the child, and some time ago a specimen was presented to the London Pathological Society, in which the gastric juice had perforated the œsophagus, and had made a hole in the left lung. There are, so far as I can see, but three modes of explanation of the appearances which these lungs present, namely, by supposing that the affected portions are gangrenous, or that they have undergone post-mortem digestion or ordinary post-mortem decomposition. The arguments against either explanation are strong. Those in reference to the first two I have sufficiently alluded to. The arguments against the last explanation, that of post-mortem decomposition, are the short time after death (in one case about twelve hours) at which the autopsies were made, absence of putrid odor, absence of any evidences of decomposition in other portions of the lungs and in the other tissues. For these reasons I think that the Society will agree that these specimens are somewhat remarkable, and that we do not yet know certainly their character.

Correspondence.

MUSIC IN CHOREA.

To the Editor of the Medical Record.

Sir—In your issue of December 2d, I noticed an extract taken from the *British Medical Journal* on the "Effects of Music on the Insane."

It reminds me of a case of Chorea which came under my care several years ago. It was a very interesting case, notes of which were taken with a view to their publication at some convenient time; but they have been mislaid, and I must depend solely on memory for the description. As it appears to me, it corroborates in a measure the theories expressed in the extract alluded to; and opposes, as far as a single case can, the views of many modern pathologists, that Chorea is intimately associated with, or allied to rheumatism, hence, primarily, a blood disease.

The case occurred in 1862. The subject, a young lady about seventeen years of age, of ordinary parentage, intelligent, with a florid complexion, of medium stature, form plump and rounded, previously healthy, with the exception that about two years previous she had Chorea of ordinary severity, which was treated successfully with Fowler's Solution. A short time anterior to the present attack, I prescribed Fowler's Solution for a slight eczema, and this she was taking when she began to notice slight involuntary movements of one arm. This fact was taken as fair evidence that, as this remedy appeared to excercise no power as a preventive, it promised little or nothing as a specific, which by many it is believed to be; therefore, as the case continued to grow worse, the arsenic was discontinued, and she was advised to use sulphate of zinc, as ordinarily prescribed for Chorea. No amelioration followed; on the contrary, the convulsive movements steadily increased. Cohosh, or black snake-root, as recommended by Prof. Wood in his Practice of Medicine, was ordered, the zinc remedy to be continued; still the symptoms steadily and rapidly increased in severity, and the convulsive action became so general that apparently every voluntary muscle of the whole body was involved.

Such a case I never saw, so violently was she thrown about from one part of the bed to another. To sit or stand was utterly impossible. Even her bed was faithfully guarded to prevent her being precipitated to the floor. One remedy after another was resorted to until tonics, antispasmodics, anodynes, stimulants, etc., were exhausted. Still the scene was unchanged, only that the picture was more and more horrible. No remissions for sleep; no repose whatever. Scarcely was there a moment's respite to receive food. Tongue sore from being frequently caught between the teeth, flesh wasting, limbs discolored and swollen by repeated bruises, exhaustion advancing rapidly. Days passed away—as many as ten or twelve—and all the while she was completely conscious of her anguish.

An officious neighbor, as the case began to assume a threatening aspect, suggested a trial of *music*. The suggestion was, however, dismissed with scarcely a favorable thought. After a few days, the remedy was again proposed, and by this time I had learned that the notion was quite prevalent in the neighborhood that music was a valuable agent in the treatment of St. Vitus' dance. I remarked that it was undoubtedly worthless, and especially so in a case of such severity, and supposed it was again dismissed. At my next visit on the morning following, to my utter astonishment, I found a violinist and his instrument "on hand," and my patient decidedly more quiet! He was invited, it appeared, the evening previous, and taking an adjoining room, he played at intervals some piece of plaintive music, the effect of which, as it was described by the attendants, was truly marvellous. She slept a little before morning, and to abbreviate the recital, the cure was rapid and complete.

In conclusion, allow me to remark that I have searched my limited library, and find no allusion to music as a remedy in Chorea:—that is, a remedy, *per se*. Récamier, at the Hôpital des Enfans Malades, at Paris, has long practised systematic movements of the affected muscles, *sometimes accompanied* with music.

Crescent, N. Y., Dec., 1867. SAM'L PETERS, M.D.

TO WHOM DOES THE PRESCRIPTION OF A PHYSICIAN BELONG?

TO THE EDITOR OF THE MEDICAL RECORD.

THERE seems to me to be a risk of so great a fallacy in your position in regard to this inquiry, that with the greatest desire to attend to my own business, and above all to avoid controversy, I must beg of you to go over the ground afresh, and seek for more information on the subject before considering it definitely settled. It is an important subject, and one which threatens to widen the breach between medicine and pharmacy; and that interest will be most damaged which obtains judgment in its favor on insufficient grounds. In a discussion now of some years' standing, legal opinions have been pretty freely quoted on both sides, with the effect upon some of us, at least, of leading to the inference that such opinions must differ as much in value as in the position taken. Therefore, lest some of us should fall into a grave error which may do much harm in a direction where mistakes are not easily corrected, let me beg of you to suspend judgment until the subject is more thoroughly examined on all sides.

By the action of a neighboring medical society, the subject is now before the American Pharmaceutical Association, a body which, from its interest in the matter, is entitled to a hearing, and the undersigned proposes presenting his views on the subject to the New York State Medical Society, at its approaching annual session. Very respectfully yours, E. R. SQUIBB.

Medical Items and News.

NEW YORK PATHOLOGICAL SOCIETY.—The following officers have been elected for the ensuing year: President, Dr. W. B. Bibbins; Vice-Presidents, Drs. T. M. Markoe and L. A. Sayre; Secretary, Dr. Geo. F. Shrady; Treasurer, Dr. W. B. Bibbins.—*Committee on Admissions*, Drs. Weir, Whitehead, Rogers, Krakowizer, and Shrady. *Committee of Publication*, Drs. Shrady, Eliot and Rogers.

CÆSAREAN SECTION.—We have received from Dr. Dibble of New Haven a report of a successful case of Cæsarean Section performed by Dr. Townsend of that city. We shall publish the details at an early date.

THE MISSOURI MEDICAL ASSOCIATION was duly resuscitated on the 12th of December, after a long sleep of ten years, and has inaugurated some wise measures relating to the future prosperity of medicine in the State. A communication from the St. Louis Medical Society, asking of the Legislature a Board of Medical Examiners to be appointed by the Missouri Association, with power to grant licenses, was adopted, and a committee appointed to prepare a suitable memorial. They also endorsed most emphatically the stand taken in the matter of medical education by the recent Convention of Medical Teachers.

BANQUET OF THE INTERNATIONAL MEDICAL CONGRESS.—The day of the banquet had been intentionally set for about the middle of the sitting of Congress, in order that it might serve as an interlude, and at the same time bring together a large number of convivials. So of the two hundred subscribers not one failed to be present.

The magnificent hall of the Grand-Hotel did not appear too large for the four or five long tables stretched out side by side. As seats were not taken until half-past eight, there was ample time in the waiting-saloon for each one to get acquainted; this was very desirable, inasmuch as the hall of the Congress was not favorable for meetings, or for presentations or hand-shaking. M. Frerichs, fluttering with ribbons and decorations, and elegant in manners; and M. Virchow, in a solid suit of black, very dry, with a false collar cutting his ears, were the objects of special curiosity. The dinner was animated, brilliant, lively; men jovial in certain quarters (on M. Ricord's side, it was said). The celebrated syphilographer was seated to the left of the president, and M. Virchow to the right. With the dessert came the toasts. M. Bouillaud, the president, opened; then followed others. Among them M. Ricord drank to the extinction of venereal diseases, and the suppression of that specialty.—*Gazette Hebdom., Aug.* 30, 1867.

New Publications.

BOOKS AND PAMPHLETS RECEIVED.

ON THE PATHOLOGY AND TREATMENT OF ALBUMINURIA. By WILLIAM H. DICKINSON, M.D. Cantab. 8vo., pp. 265. London: Longman, Green & Co.

PENNSYLVANIA HOSPITAL REPORTS. Vol. I. 1868. Phila.: Lindsay & Blakiston.

PLASTICS: A NEW CLASSIFICATION AND A BRIEF EXPOSITION OF PLASTIC SURGERY. By David Prince, M.D., Phila.: Lindsay & Blakiston. 1868.

DISEASES OF THE HEART, THEIR DIAGNOSIS AND TREATMENT. By DAVID WOOSTER, M.D., San Francisco. H. H. Bancroft & Co. 1867.

SEVENTEENTH ANNIVERSARY MEETING of the Illinois State Medical Society. 1867.

Original Communications.

A BRIEF DESCRIPTION OF STELLINE, STELLURINE, CONCHOIDINE, AND PIGMENTINE,

WITH SOME OF THE PATHOLOGICAL STATES AND CONDITIONS CAUSED BY THEIR FORMATION AND PRESENCE IN THE HUMAN BODY.

By J. H. SALISBURY, M.D.

STELLINE.

Stelline is a pathological product, formed by the parent cells in the human body, only in disease. It may be formed at any given time, by one class of parent cells only, or by all.

When one class of cells becomes so disturbed in their functions as to form this body, this condition, if not removed, has a tendency to extend to the other classes of parent cells, and soon the entire organism is under its influence.

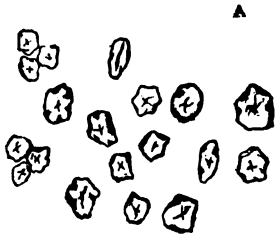
When this body is formed in the system, its presence produces a greater or less amount of irritation or disturbance, according to the state of the system, the drinks and food taken, and the hardships and other baneful influences to which it is exposed. Its presence may be confined for a while to either the blood apparatus, the skin, or to the mucous membranes.

The tendency is for it to pervade the entire organism, when once the conditions are present for its formation. Its principal formation, however, may be for a long time confined mainly to one class of parent cells.

For instance, when this constitutional diathesis is present, and there is a weakened and irritable c ndition of the bronchial membranes from any cause, this body is likely to be formed here first, and continue to be formed largely in this locality for a long time, producing, perhaps, asthma and bronchial catarrhs in their various phases, without its being formed to any great extent by parent cells in other parts of the organism.

It may be formed for some time by the parent cells of the blood apparatus, and appear but in small quantity elsewhere. It may be formed largely by either the mucous membranes or skin, and be but slightly present in other parts of the body. The tendency, however, is for it, when once established, to pervade the entire organism, and to be discoverable by the microscope in the blood, and all the secretions and excretions, and in and on all free surfaces of the body. Whether found locally or generally distributed, the treatment is mainly the same, which should in all cases be directed to the removal of the cause.

This body in shape is sometimes oval and flattened, but almost always either polyhedral or polygonal, with a peculiar radiating or stellated fracture in the centre. From the peculiar characteristic fracture I have given this body the name *stelline* (*a*). Its composition is not yet determined. Its presence produces much disturbance. If formed to any great extent in the blood apparatus, its presence has a tendency to produce languor, fatigue, restlessness, irritability, despondency, wakefulness, constipation, palpitation of the heart on any excitement, with more or less irregularity of beat; dull aches and pains in the cardiac region and chest, back of neck, small of the back and head, with more or less dizziness. In reading, the lines and words sometimes run together. In sewing, the head becomes bewildered. Objects seem to tremble as if heated air were rising before the eyes; and the patient reels at times in walking. The muscles, under the influence of exertion, ache, and become soon exhausted. The limbs prickle, and manifest premonitory symptoms of paralysis. The head becomes at times numb, constricted, and bewildered, and thinking is painful and difficult. The memory is impaired, and the mind readily gives way to anxiety and trouble, and frequently indulges in melancholy forebodings. Small crosses become painfully oppressive, and the patient frequently contemplates suicide; but is fearful to execute his thoughts, though he sometimes does.


A

In this condition some part of the body may become temporarily paralyzed; and in persons of a peculiar sensitive nervous system, either cataleptic or epileptic paroxysms may result. If stelline is being formed in the skin to any great extent, it (the skin) becomes often dry and furfuraceous, though sometimes, especially if there is derangement of the pulmonary apparatus, or a rheumatic tendency, the skin may be covered with a cold, clammy, sticky sweat, which has a sour smell. Under such conditions the cuticle will be found full of algoid spores and filaments, and sometimes filled with a peculiar fungoid spore, which has a brilliant nucleus.*

If this body is formed largely by the mucous membrane of the bronchi, the patient will be troubled with severe bronchial coughs, and, perhaps, asthmatic attacks; or, perhaps, under certain conditions, be afflicted with "*rose*" or "*hay asthma.*" This is purely bronchial gravel. Such cases cannot be cured without removing the cause.

If formed largely by the nasal mucous membranes, nasal catarrh of an obstinate character results, which will not yield till the cause is removed. If this body is being formed largely by the mucous membrane lining the uterus, there results severe uterine catarrh, which will not yield permanently till the cause is removed.

If this body is being formed in the tubuli seminiferi spermatorrhœa is the certain result. As the little plugs of stelline come away, they produce irritation, and excite dreams and emissions. It is useless to undertake to cure such cases without removing the cause. If this body is being formed largely by the mucous membranes lining the urinary organs, more or less irritability of these organs will result.

The formation and accumulation of stelline in the blood apparatus, simply, with the abnormal states and conditions arising therefrom, constitute a disease which may be designated by the name *stellinemia*. That arising from the formation and accumulation of this body throughout the system, may, for like reasons, be called *stellystema*.

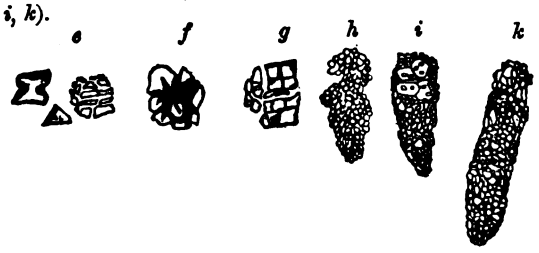
STELLURINE.

This is a pathological product, formed in disease by the parent cells. It may occur in the blood; in the epidermic layer of the skin; in the urine and fæces; in the discharge in uterine catarrh; in the expectoration; and in the secretion of bronchial and nasal catarrhs. Wherever it occurs it produces irritation and disturbance. It may be absent or occur in small or large quantity in the blood; and be absent or occur in small or large quantity in any or all of the other localities above named. Where it begins to be formed by

* Mikros, iris (Salisbury).

any one class of parent cells, the tendency is for the same pathological condition to extend to the others; and in a longer or shorter period—according to the exposures and condition of the system—it becomes a general or constitutional trouble. I supposed for a long time that this body was cystine.

The crystals are usually irregular in shape, very transparent, tender and friable, and highly refractive. They have a remarkable tendency to fracture into many fragments, as the blood cools and contracts by clotting, while being viewed between the slides of the microscope. The crystals, on the least pressure, frequently fly asunder with considerable force, scattering the pieces in every direction—like glass badly annealed. The fracture is more or less conchoidal, and frequently starts from the centre of the crystal and radiates in various directions, dividing it into two, three, four, or more parts, and sometimes into as many as fifty or one hundred — minute, sharp, angular fragments (*e*, *f*, *g*, *h*, *i*, *k*).



From the stellated character of the fracture I have given to this body the name *stellurine*. It is distinguished from stelline by the peculiar shape of the crystals. Stelline has like it a tendency to fracture, but to a much less degree.

Cystine differs from this body in not being inclined to fracture, and in being less transparent, refractive, and friable.

E, *f*, *g*, *h*, *i* represent crystals of stellurine as seen in the freshly drawn blood before and after fracturing.

This body, when present in the blood to any great extent, like stelline, produces dizziness, impairment of memory, despondency, wandering rheumatic neuralgic pains and aches, nerve irritability, sleeplessness, and often a strange, mixed-up, "crazy feeling" (as patients describe it) in the head. The head feels frequently as if a band were drawn tightly around it; objects viewed, tremble as if heated air were rising before them; and occasionally the patient reels in walking as if intoxicated.

The heart palpitates on excitement, and the beat becomes sometimes intermittent, and a dull uneasy ache, with occasional sharp transient pains, occurs in the cardiac region. There is a tendency for the muscles of organic life to lose partially their tonicity, the heart-beat becoming more or less deranged, and the peristaltic action of the bowels impaired. There is frequently a strange mixed-up numb feeling about the head, with prickling numb sensations in the extremities.

The voluntary muscles readily tire and ache when over-fatigued. Such persons, under the proper conditions, may be affected with nasal, bronchial, or uterine catarrhs, with asthma, "hay" or "rose fever," with one form of rheumatism, with cataleptic or epileptic manifestations, with urinary or seminal disturbances, with strange hallucinations, and even insanity, and sometimes with more or less extended paralysis.

Medical writers have been in the habit of viewing many local manifestations of disease as purely local difficulties. For instance, oxaluria, cystinic uria, phosphuria, etc., which are treated as local troubles, are, as a general rule, really constitutional pathological states—these several bodies being formed in the blood, expectoration, fæces, etc., as well as in the urine. The presence, as a general rule, of any abnormal product, in any given part of the organism, is but a local manifestation of a constitutional pathological formation, which will be found to show itself sooner or later to a greater or less extent in other localities.

Wherever we have oxaluria, cystinic uria, phosphuria, stellin-uria, stellurin-uria, etc., we have also oxalemia, cystinemia, phosphemia, stellinemia, stellurinemia, etc. This whole matter will be more fully treated of in a paper on this subject now nearly ready.

The formation and accumulation of stellurine in the blood apparatus simply, with the pathological states and conditions arising therefrom, constitute a disease which may be designated by the name *stellurinemia*. That arising from the formation and accumulation of this body throughout the organism, may, for similar reasons, be named *stellurystema*.

The formation and accumulation of either stelline or stellurine, or both, or of cystine, oxalate of lime, or the phosphates, in the blood apparatus, may, under the proper conditions, result eventually in organic disease of the heart. These bodies all have a tendency to partially paralyze the muscles of organic life. The muscular power of the heart at first becomes weakened, or its muscular tonicity so impaired, that any considerable exertion or excitement, physical or mental, excites the heart to increased activity, while during passive conditions the beat is usually slow and irregular. In this state, the circulation is either too sluggish or over active. The heart responds to every little excitement and exertion to which either body or mind is exposed. Dull aches and pains are frequently felt in the cardiac region. The heart sounds are all normal, for a long time after the disease has begun to insidiously work its sure way. To the unaided senses, there appears to be no organic disturbance; hence the pathological condition of the organ is supposed to be sympathetic or functional. Organic changes are, however, slowly in progress. The lining tissue of the heart and large vessels leading to it, becomes thinly or thickly studded with minute microscopic granulations or eminences. These, as they grow, take on a smaller pedicle and a larger body. They are really minute thrombi, made up of fibrin, inclosing minute crystals and granules of the bodies before named. These bodies are the specific cause of the thrombi. The thrombi frequently become detached and float, as emboli, freely in the blood stream, unless so large as to be checked in their course by the capillaries.

The formation of minute thrombi goes on step by step, till by and by the heart sounds become abnormal, when no one doubts the presence of organic disease. It may however now, perhaps, be too late to repair the damage done, or even to check the progress of the pathological conditions and formations already far advanced toward a fatal issue; while if the disease had been discovered and treated earlier, there would have been but little difficulty in its removal.

Here then again the microscope comes in, and reveals to us with certainty the cause of a most dreaded and fatal disease, while yet it is in a stage that is amenable to treatment.

PIGMENTINE.

This is a peculiar brownish-yellow coloring matter, that occurs in the blood in all cases where pigmentary matter is being deposited in an unusual degree—either in spots or generally over the surface—in the under layer of epidermic cells. It occurs in thin plates, or laminæ, irregularly fractured in various directions, as represented at *l*. Patients hav-

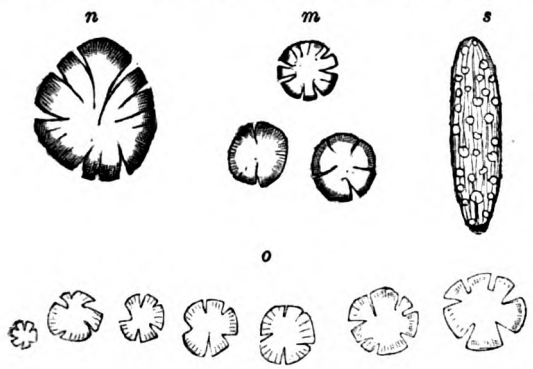
ing this substance forming largely have a peculiar brownish-yellow, bronzed, sickly hue. It is found in larger or smaller quantity, according to the extent and depth of the pathological coloring. In such cases, the digestive apparatus has become more or less deranged — usually from defective alimentation and exposures; and the blood is found generally thin, and its histological elements more or less broken down—the blood glands performing their office of forming blood imperfectly. Iron, quinine, iodide potassium, and good healthy alimentation are valuable means for removing this disease.

To the formation and accumulation of this body in the blood apparatus and the resulting local and systemic disturbances I have given the name *pigmentemia.*

CONCHOIDINE.

Conchoidine is a peculiar body, found only occasionally in the blood. It is usually—in shape—of an oval or circular disc-like form; more or less flattened in the direction of the shortest diameter. It occurs almost always with fractures extending from the circumference toward the centre.

m, *n*, *o*, and *s* represent this body as it appears in the blood. It resembles very much a fat globule, so far



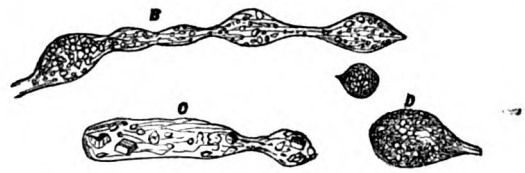
as its lustre and refracting characters are concerned; but, unlike it, it fractures into fragments which preserve their form. These broken pieces are sometimes met with in the blood.

Of the causes which produce these bodies, or of their chemical constitution, or of the pathological conditions excited by their presence, but little has as yet been determined. They occur in the blood — usually — in connection with other abnormal insoluble products. They undoubtedly give rise to more or less systemic disturbance. To the group of abnormal states and conditions excited by the presence and accumulation of this body in the blood apparatus I have, for present convenience, given the name *conchoidemia.*

REPORT OF THREE CASES.

Case I.—*b*, *c*, and *d* represent emboli, from the blood of a lady, Mrs. G. D., of Cleveland, Ohio, who has been laboring under *stellinemia* and *stellurinemia* for several years. About eighteen months ago, she gave birth to a child, which soon died. She seemed to get along quite well after the labor; but as soon as she was able to get up and move about, she found the least exertion fatigued and prostrated her. As soon as she assumed the erect position, a peculiar mixed-up, dizzy, numb feeling would come over her, and she would have to lie down. Her appetite was good, and she kept in good flesh.

About six months after the labor, she came into my hands. On examining her case I found she was laboring under the diseases previously named. Her blood contained many granules and crystals of *stelline* and *stellurine* (*a*, *e*, *f*, *g*, *h*, *i*, *k*), and also many emboli, —*b*, *c*, *d*—filled with crystals and granules of *stelline*



and *stellurine*. The urine also contained these bodies in large quantity.

She had been under treatment for ulceration of womb, and softening of brain.

On examination, found her womb trouble simply catarrhal and slight, and there were no evidences of brain softening.

She seemed to have no muscular power or endurance. The least exertion would bring on an exhausted, half-paralyzed condition of the whole body, with a peculiar mixed-up, dizzy feeling.

The heart sounds were normal, but the pulsations were at times quite weak and irregular. Listening to reading or talking for a short time would frequently tire her, the same as physical exertion, and would bring on sometimes the same bewildering sensations.

Bowels very constipated — almost paralyzed — and urine high-colored, scanty, and of a sp. grav. of 1.030 and upward.

The least exertion would excite the flow of perspiration; although she had most of the time, when still, sensations of chilliness in extremities and back, unless kept well covered and in a warm room.

Placed her on the following treatment:

℞. Acid. Sulph. Aromat. . . . ℥ iii.
Quin. Sulph. . . . . ʒ ii.
Aquæ . . . . . ℥ ii.
M.

S. Put 2 teaspoonfuls in half a pint of warm water and wash the body and limbs all over every day, and wipe dry after.

After the bath to be pounded all over with a hair ball for 10 minutes, and rubbed afterward thoroughly with the bare hand, till the surface "was in a glow.'

℞. Potass. Iodid. . . . . ʒ iv.
Tr. Cinchonæ comp. . . . . ℥ v.
Tr. Gentian. comp. . . . . ℥ i.
Wine Colchicum (seeds) . . . ʒ i.
M.

S. Take a teaspoonful before each meal.

℞. Acid. Hydrochlor. dil. . . . ℥ iii.

S. Take 10 drops in a glass of water, 10 minutes after breakfast and dinner.

℞. Quin. Sulph. . . . . ʒ i.
Ferri Lactat. . . . . ʒ ss.
Strychnin. Hydrochlorate . . gr. ¼.
Ext. Gentian.
Syrup, āā q. s.
M. Make pills 40.

S. Take a pill 2 hours after each meal.

℞. Pil. Aloes et Myrrh. } XX
U. S. D.—S. C. }

S. Take one on retiring.

Avoid all sweets and organic acids.

To eat rare beef, milk, the yolks of eggs soft boiled, with a little bread and potato.

During a portion of the time she has used the nitro-muriatic acid bath in place of the one before mentioned.

Under this treatment she has slowly but steadily improved. She is still under treatment; and is improving more rapidly than at any previous time.

The blood and secretions are almost free from stelline and stellurine. As these bodies become less and less, her strength and muscular endurance gradually improve.

I should have stated, that for several years before the labor, she had a tired feeling frequently, with occasional attacks of dizziness. These gradually increased in severity and frequency up to the time of delivery.

Case II.—Mr. E. R., of Maumee City. Age, eighteen. Appetite, appearance, and general health good. Does not know when to stop eating. Eats anything set before him. Has a severe attack of *stellurinemia* and *conchoidemia*. Has lost almost entirely his will power. This almost total loss of will extends back for about twelve months. Previous to that time—for several years—he was troubled with fits of despondency and bewildering sensations in head. Was fearful that something dreadful would happen to him. Was, however, able to attend to business up to about fourteen months since. He came under my care in September, 1867. When I first saw him, he was in the condition he had been for some ten months.

He perfectly understood all that was said to him—would smile when anything laughable occurred, memory good, and manifested a disposition to follow directions strictly, but was unable to answer questions, or even to say yes and no, unless excited. If he saw a horse running away, or cars coming, or a house on fire, he could talk as well as any one, apparently. As soon, however, as the excitement ceased, his will power left him, and with it the power of speech. If directed to go across the room and get a book, he perhaps would rise from his chair, and, unless told to go ahead, would stand by the chair till he was directed to proceed or sit down. Sometimes he would get half-way across the room, and stop and stand still till told to go on. In eating, he had to have his food placed on his plate, and unless told to proceed at every mouthful, he would stop and sit motionless till his elbow was jogged, or his will assisted by the direction of a second party.

On examining his blood, found it to contain numerous crystals of stellurine (*e, f, g, h, i, k*) and conchoidine, represented at *o* and *s*.

His blood was otherwise quite normal, save that here and there were small emboli (*k* and *s*).

Placed him on the following treatment:—

℞. Potass. Bromid. . . . . ℥ iss.
Tr. Cinchonæ comp. . . . . ℥ vi.
Tr. Gentian. comp. . . . . ℥ i.
Aquæ Camphor . . . . . ℥ i.
Aquæ Menth. Pip. . . . . ℥ i.
Wine Colchicum (seeds) . . . ʒ i.

S. Take a teaspoonful before each meal, and on retiring.

℞. Acid. Hydrochlor. dil. . . ℥ iii.

S. Take 10 drops in a glass of water after breakfast and dinner.

℞. Acid. Nitromuriat. dil. . . . ℥ iv.
Quinin. Sulph. . . . . ʒ ii.

S. Put 1½ teaspoonfuls in half a pint of warm water, and wash the body and limbs all over every night, and wipe dry after.

℞. Tr. Iodine . . . . . ℥ iss.

S. Paint on each side along the whole length of the spine every other morning.

Avoid sweets and organic acids. Live on rare beef, oyster soup, the yolks of soft-boiled eggs, beef tea, milk, and a little bread and potato. Avoid all stimulants.

Nov. 7th, found him considerably improved. He could answer questions part of the time by using a little effort, and could quite readily say yes and no when asked direct questions. Continued treatment.

I should here say that all the organs of the body appear quite healthy. The heart-beat is rather weaker and slower than normal. In his habits he has always been very correct—is intelligent and strictly moral—he being a conscientious member of church. So far as I can learn from him and his family, and discover from my own observations, he is not troubled with seminal emissions.

Case III.—Mr. A. W. P., Cleveland, Ohio. Called on me in October, 1865. Has always been, up to the period of this trouble, a very strong, robust man, of remarkable endurance. His habits of life active, and labors severe. Age forty-two. Has *stellinemia* and *oxalemia*. For a few days previous to his first visit he had been laboring under temporary aberration of mind. Was perfectly sane when I first saw him; but was laboring under great depression of spirits, and was fearful he was becoming insane. His family were making arrangements to take him to the asylum at Newburgh, but at my solicitation desisted, and placed him in my hands for medical treatment. On working up his case, found it to be one of *stellinemia* and *oxalemia*. Blood filled with masses of granules of oxalate of lime and a multitude of well-defined crystals of stelline.

Urine loaded with crystals of oxalate of lime, both dumb-bell and octohedral—also contained crystals of stelline. Sp. grav. 1.030 to 1.035.

He also had severe nasal catarrh. The catarrhal secretions were filled with crystals of stelline, oxalate of lime, and an algoid vegetation (*zymotosis catarrhalis*). Bowels constipated and portal system congested. Heart sounds normal, but pulsations slow and intermittent, or irregular. Great want of tonicity in muscles of organic life; a tendency to paralysis. Had prickling, numb sensations in extremities, and a dizzy, mixed-up, confused feeling in head, with partial loss of memory. Sometimes he suffered terribly with severe pains in front part of head, accompanied by a feeling of stricture, as if the head were in a vice.

The following is a brief but graphic description of some of the more prominent symptoms, given by himself:—

"In the month of April, 1864, my health failed. The first intimation I had that anything was wrong with me, my mind failed to work; that is, I could not figure correctly, was confused, could not collect my thoughts, or express them intelligently. There seemed to be a heavy weight upon my head—a heavy pressure about the brain. By ceasing to labor, would be better for a little time; but as soon as I commenced again this pressure and confusion would return, and with it a terrible depression of spirits. I could not get rid of the idea that everything was going to fail—country and all were going to ruin. I changed my occupation, hoping to get relief, but continued to grow worse until the fall of 1865. At this time I would have spells, lasting several weeks, of unceasing pain and pressure in my head—not sleeping any for weeks together—and occasionally would lose myself, or not be conscious what I was doing, for from a few hours to two or three days, and would sometimes wander off. At such times my hands and feet would become cold, numb, and almost lifeless. The sensation I had in my head I cannot describe better than to say it was like that produced by

putting the head into a vice, and continuing the tightening operation until sensation ceased (numb and dead). At other times there was a continual noise in it, and any little sudden sound would alarm me. I was in continual fear, and could not tell why. Had a continual dread of seeing any one, especially if I had to converse with him; for it seemed to me impossible to arrange my thoughts and express them in words so as to be understood. When this pressure was gone, I would feel as well as ever, only would be weak, suffering so long from pain.

"In the fall of 1865 I commenced taking medicine ordered by Dr. Salisbury, and in four weeks' time was able to resume my occupation, and was able to follow it through the winter. Ceased taking medicine and did not follow the doctor's directions, and in the month of May, 1866, was taken worse again, and continued so through the summer. Was compelled to seek medical advice again in the month of October. Followed his directions to the letter for seven months, and then, with the doctor's consent, commenced business again, which I have steadily followed since. I am now feeling perfectly well. A. W. P.

"July 25th, 1867."

This case had been diagnosed, previous to my examination, as one of brain-softening. Placed him on the following treatment:—

℞. Acid. Nitromuriat. dil. . ℥ vi.

S. Put a teaspoonful in half a pint of warm water, and wash the body and limbs all over every night, and wipe dry after.

℞. Potass. Iodid. . . . . ʒ viss.
Tr. Cinchonæ comp. . . ℥ v.
Wine Colchicum (seeds) . ℥ i.
Tr. Gentian. comp. . . . ʒ i.

S. Take a teaspoonful before each meal.

℞. Tr. Iodine . . . . . ℥ iss.
Camel's-hair brush.

S. Paint the whole length of the spine and over the heart every other day.

℞. Pil. Hydrarg. Prot-Iodid.
¼ gr. sc. . . . . xxx.

S. Take a pill two hours after breakfast and dinner.

℞. Potass. Acet. . . . . ℥ ii.
" Nit. . . . . ℥ ss.
Spts. Nit. dulc. . . . . ℥ i.
Aq. Menth. Pip. . . . . ℥ vii.

S. Take a tablespoonful in a glass of water at night on retiring.

Under this treatment, after the first two weeks he improved rapidly. After about four weeks' treatment, he visited Kelly's Island and ate grapes freely. Remained a week or ten days on the island, gaining fifteen pounds in weight.

Saw him after this every four weeks. Continued treatment for three months, when he thought himself well enough to stop treatment, which he did against my advice. From January to May, 1866, he remained quite well, and engaged in active business. In May he was again taken down, and confined to his house and bed for about six weeks. His symptoms were intense suffering and pressure in head, producing great prostration and despondency, like those previously described.

The last of June he came again for treatment, and went to work taking his medicines in earnest. Remained two weeks, and then went to Kelly's Island, where he remained four weeks, improving rapidly. He then returned home and engaged in business. In November following gave himself up to treatment, which he has pursued faithfully to this date, July 25th, 1867. Calls himself well, and is able to attend to any kind of business. There is, however, a small quantity of stelline and oxalate of lime in the blood and secretions, for which reason he still continues treatment.

ANOMALOUS CASE OF LABOR.

By WILLIAM J. BURGE, M.D.,
of Atchison, Kansas.

On the morning of Dec. 13, 1867, I was called in consultation with Dr. J. M. Linley, to attend Mrs. W——, æt. about forty, in her eighth confinement. She had been in labor since noon of the 12th, soon after which time another physician had visited her and detected prolapsus of the funis, and one of the feet presenting. Owing to other engagements, he declined to take charge of the case, and directed the woman to send for somebody else. At midnight she commenced flooding, and sent for Dr. Linley, who administered free doses of ergot; and by the ordinary examination discovered the prolapsed cord, which had ceased to pulsate, and a foot presenting. There were no pains of any consequence, and as the hæmorrhage had nearly stopped, Dr. Linley waited about two hours for the action of the ergot, giving repeated doses of the fluid extract and also of the powder.

At the end of this time there were slight pains, and still some hæmorrhage, and I was sent for in consultation. On examination, I found the same state of things above mentioned; and being requested to try and bring down the other foot, I introduced my hand and satisfied myself that the left foot was presenting. I then felt a portion of the placenta, and in close proximity to it what I supposed to be the right tuber ischii, but soon recognised as the head (vertex).

Dr. Linley then examined, and assured himself of the correctness of my diagnosis in every particular. The woman resisted every effort to change the position of affairs. We concluded to put her under chloroform and endeavor to turn and deliver, or to return the foot. There was much delay in obtaining the consent of the family. In the meantime the pains came on more actively, and a second examination convinced us that the head and foot were advancing in the same relative position, and with every probability of becoming impacted. Warning the friends against longer delay, and getting permission to do as we thought best, we sent for chloroform and instruments necessary for extraction. About an hour passed before the messenger returned, and during that time, to our surprise and gratification, the foot and placenta gradually receded, the head advanced, and spontaneous delivery was effected without an untoward symptom. The woman had a capacious pelvis, and had borne seven healthy children. This child was well developed, but was sacrificed by pressure upon the cord.

Cazeaux relates a case of similar presentation (with the exception of placenta prævia) in which embryotomy had to be performed.

Air and Water Pads for Fractures.—Christopher S. Jeaffreson, M.R.C.S., has figured in the *Lancet* an apparatus for the treatment of fractures, which is not only simple and efficient but cheap. The main feature consists in the use of air and water pads formed of india-rubber bags, which are accurately adapted to the insides of the coaptation splints. The great advantage of this contrivance is the establishment of well-regulated and equable pressure, as well as that of cleanliness, over the employment of the ordinary compresses.

INHALATION OF SPRAY OF TINCT. FERRI CHLORIDI IN TRAUMATIC PULMONARY HEMORRHAGE.

By GEO. M. STERNBERG, M.D.,

BREVET MAJOR AND ASSISTANT SURGEON U. S. A., FORT RILEY, KANSAS.

The following case presents some points of interest, and illustrates one of the uses of Richardson's spray apparatus.

Mr. W., a merchant, aged 28, while attempting to put a drunken man out of his store, received a stab in the neck, inflicted by a long, narrow-bladed butcher's knife. The knife entered the neck on the right side two and one-half inches above the clavicle, and just to the right of the common carotid artery, cutting the anterior jugular vein, and passing downward and backward into the lung.

The bleeding from the vein was free, but a bystander controlled it by pressure with his thumb, and it did not recur.

Mr. W. at once commenced coughing and expectorating bright red blood, filled with minute bubbles of air. From this time until I was called (about eighteen hours) he continued to cough up every few minutes a mouthful of blood.

When he was first wounded he sent for a hospital steward of the army, with whom he was acquainted. The steward probed the wound, and stated that the œsophagus was wounded. I presume his diagnosis of the case was founded upon the facts that blood came from the mouth, and that any attempt to swallow the medicine he gave produced a violent paroxysm of coughing. The steward prescribed tinct. ergot with a view of controlling the hæmorrhage, and injections of beef tea and brandy to keep up the pulse. As the hæmorrhage continued and the man was rapidly becoming exhausted, his friends became alarmed and sent for me. After seeing the case, I at once sent for my Richardson's spray producer and some tinct. ferri chlor. The distance was six miles, and it was two hours before my messenger returned. In the meantime Mr. W. continued to cough up a mouthful of blood every few minutes, and the total amount during the two hours could not have been less than sixteen fluid ounces. Perfect rest was enjoined, and no treatment adopted until the spray apparatus arrived. I then added half ounce tinct. ferri chlor. to five ounces of water, and placing the extremity of the instrument well back in the mouth, caused the spray to enter the lungs, by pressing the bulb at each inspiration. This was continued for about a minute, and after an interval of five minutes was again resumed for a minute.

The hæmorrhage was arrested completely, and did not recur. About twenty minutes after a hypodermic injection of morph. sulph. gr. ¼ was administered, and in a very short time the patient fell into a quiet sleep. I remained with him all night. He occasionally woke up for a moment and then dropped asleep again. The next morning he commenced to cough up occasionally a little dark clotted blood, evidently a part of the clot formed by the action of the tinct. ferri chlor.

Perfect rest was enjoined, and injections of beef tea and brandy were administered from time to time during the next twenty-four hours. The following day he was able to swallow a little wine and beef tea, and in addition to the small clots of dark blood, a little muco-pus was expectorated.

He continued rapidly to improve, the external wound healing by first intention, and there being no inflammation of the lung beyond the immediate vicinity of the wound. He is now (nine days after the injury) able to sit up in his bed, and attend to some business.

He lost his voice entirely from the moment he was wounded, and has not yet regained it. He can only swallow liquids, in small quantities at a time, and then by an effort and using great care, as there is a disposition for them to pass into the larynx, producing violent paroxysms of coughing.

These phenomena are probably due to section of the recurrent laryngeal nerve, or some of its branches.

Original Lectures.

LECTURES UPON THE PHYSICAL EXPLORATION OF THE ABDOMEN.

DELIVERED IN THE PRELIMINARY COURSE AT THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NEW YORK.

By ALFRED L. LOOMIS, M.D.,

PROFESSOR OF INSTITUTES AND PRACTICE OF MEDICINE.

Lecture III.

Physical Examination of the Kidneys, Bladder, Uterus, and Ovaries. Rules for Performing Uterine Auscultation.

Gentlemen—This morning I will detail to you as briefly as possible rules which may guide you in physical examinations of the kidneys, bladder, uterus, and ovaries. I will commence with the kidneys. The kidneys, as you are aware, in health are situated in the lumbar regions, in the space corresponding to the two last dorsal and the two upper lumbar vertebræ; the right is a little lower than the left. Superficially, they extend from the eleventh rib to the os ilii. The right is bounded above by the posterior and inferior portion of the right lobe of the liver; below, by the cæcum; anteriorly, by the ascending colon; and posteriorly, by the spinal column. The left is bounded above by the spleen, anteriorly and inferiorly by the colon, and posteriorly by the spinal column.

In disease, the kidneys may be increased or diminished in size. Atrophy or diminution in size can hardly be determined by physical examination, so that enlargements are the only conditions to which physical exploration is applicable. The kidneys may be enlarged from calculi, pyelitis, which sometimes converts the kidneys into a bag of pus, cancerous and tubercular deposits, hydatid cysts, and simple distension, the result of obstruction of a ureter. A tumor is also sometimes developed at the upper border of a kidney, from disease of the supra-renal capsule.

Inspection rarely furnishes any evidence of enlargement of a kidney. And not unfrequently after examining the lumbar regions by *palpation* with great care, and by careful comparison of the two sides, we are unable to recognize any change in the size of these organs; but as soon as we place our hand anteriorly and press firmly towards the normal position of the kidney, a tumor is felt; then by pressing the tumor backwards, our other hand resting on the lumbar region of the same side, we at once determine that this tumor has its origin in the kidney. The part of the abdomen in which a renal tumor is felt will vary according to the nature of the disease, and the portion of the kidney involved.

Percussion.—In percussing the kidneys, auscultatory

percussions should be employed; the patient should be placed on the abdomen and chest, which position will allow fluid accumulations in the abdominal cavity to gravitate forwards, and the intestines to float upwards. The external margin of the kidneys can then be readily determined by the tympanitic note of the intestines around their circumference, except where they are in relation with vertebræ. In *health*, the outlines of the renal dulness will correspond to the limits already given. Any enlargement of these organs will cause a corresponding increase in the area of renal dulness; but we cannot by physical examination establish the exact nature of the disease to which the increase in the organ is due.

The sources of error in the diagnosis of enlargements of the kidneys vary according as the right or left kidney is the seat of disease.

Enlargement of the right kidney may be mistaken for an enlargement of the right lobe of the liver, for cancer of the pyloric orifice of the stomach, for fæcal distension of the colon, and for enlargement of the right ovary. The rules for distinguishing it from each of these have been already given in a previous lecture, as likewise for distinguishing enlargements of the left kidney from enlargement of the spleen, the left ovary, and from fæcal distension of the descending colon.

Bladder.—When the bladder is empty its position cannot be determined by physical exploration; it can only be detected when it is distended, and rises above the pubes; when this is the case, a tumor is visible in the hypogastric region, which on palpation is smooth and oval. Its circular margin is easily made out by observing the tympanitic sound of the intestines on the one hand, and the dull sound produced by the bladder on the other. In infants, the bladder is not as deep in the pelvis as in adults, consequently a smaller quantity of urine in the bladder can be recognized. A distended bladder can only be mistaken in the female for a gravid uterus, or a uterine tumor; the use of a catheter removes all doubts.

Uterus.—The unimpregnated uterus in its normal state is situated in the lower part of the hypogastrium, and is inaccessible to the touch (externally), or to percussion; but when normally developed by impregnation, or abnormally by disease, palpation, percussion, and auscultation, furnish us with important information.

In pregnancy, at the end of the second month, a dull sound on percussion, just above the pubes, indicates the development of the uterus; later, as the uterus increases in volume, and rises into the abdomen, we are able, by the oval tumor felt in the hypogastrium, and by the circumscribed area of dulness corresponding to the situation of the tumor, to establish strong presumptive evidence of pregnancy. The presumption becomes strengthened if the area of the dulness increases with the regularity proper to gestation. But percussion and palpation are insufficient to determine whether the development of the uterus is due to pregnancy, or to some morbid deposit in its walls or cavity, as fibrous tumors, etc.

At the end of the fifth month, the evidence furnished by both these methods is inferior to auscultation.

Rules for performing Uterine Auscultation.—The patient should be placed on her back, with her thighs slightly flexed, so as to relax the abdominal muscles; sometimes it is well to incline the body from one side to the other, or forwards so as to withdraw the pressure of the uterus from the pelvic arteries. The abdomen should be uncovered; as the sounds to be examined are of slight intensity, and very circumscribed, their study demands close attention and perfect silence. The stethoscope is always to be preferred, and the uterine tumor should be auscultated successively at different points.

After the fourth month of gestation, if the uterus contains a living fœtus, we may hear three distinct sounds: the *placental bruit*, which is evidently connected with the circulation of the mother; *the fœtal heart*, and the *funic souffle*, which are connected with the circulation of the fœtus.

Placental Bruit.—This sound is single, intermitting, and in character is a combination of the blowing and hissing sound; it increases in intensity up to the period of labor. It is believed to depend upon the rapid passage of blood from the arteries into the distended venous sinuses. It is synchronous with the maternal pulse, is subject to the same variations, and is always heard before the pulsation of the fœtal heart.

The *area* over which it is audible varies. In some instances it is limited to a single point, in others it is audible over a surface of three or four inches, and in a few it is heard over the whole uterine tumor; although there will always be one spot of greatest intensity, corresponding to the placental attachment. It is also intensified by uterine contractions.

During the first half of pregnancy, it is usually heard with greatest intensity in the median line, a little above the pubes; after the fifth month at the lateral and inferior borders of the uterus, and next in order of time it will be heard at the fundus.

This sound may be confounded with the respiratory murmur of the mother, and with intestinal murmurs; these murmurs, however, are not synchronous with the pulse of the mother; and if this fact is remembered, there will be little difficulty in distinguishing them. As a proof of pregnancy, placental bruit is not positive, as it is sometimes heard in connection with uterine and ovarian tumors. It does not prove that the fœtus is alive, for it is heard for a time after its death. Its negative evidence is of less value; for if the placenta is attached posteriorly, we may not be able to hear it, although pregnancy exist.

Funic Souffle.—This sound is usually heard at a point quite remote from the placental bruit; it is short, feeble, and blowing in character, and corresponds in frequency with the fœtal pulsation. It is supposed to depend upon obstruction to the transmission of blood through the umbilical arteries, as from twisting or knotting of the funis, or from external pressure; it is not a constant nor even a frequent sound; the conditions which produce it are rarely met with.

Fœtal Heart Sound.—This sound consists of a succession of short, rapid, double pulsations, varying in frequency from 120 to 140 per minute. The first sound is short, feeble, and obscure, while the second (the one we usually hear) is loud and distinct, and may be heard over the body and limbs of the child. This sound has been aptly compared to the ticking of a watch wrapped in a napkin, and is usually first heard at the middle of the fourth month. The frequency of the pulsations does not vary with the age of the fœtus. The extent over which the fœtal heart sound is audible varies; usually it is transmitted over a space three or four inches square. The location of the sound is determined by the position of the fœtus. It has been stated that by drawing a horizontal line, and dividing the uterus into two equal parts, whenever the maximum of intensity of the sound is below this line, it is a vertex presentation; when above it, a breech; also when the fœtal pulsations are heard low down in front on the left side, that the fœtus is in the first position (R. O. I.); if heard below, and in front on the right side, it is in the second position (L. O. I).

Twin pregnancy may sometimes be determined by

the presence of heart sounds heard at distant points over the uterine tumor, and by the absence of synchronism in the two pulsations. The sources of deception in exploring for the fœtal heart sound are the liability of confounding the pulsations of the iliac or abdominal arteries of the mother with it; in most cases their situation, comparative frequency, and absence of double pulsation, will determine their character. But a difficulty will sometimes occur in discriminating between them when the maternal pulse is very much increased in frequency, and the fœtal diminished. Under such circumstances we must be guided by the character of the sound; and if it is or is not synchronous with the radial pulse.

Again, in the early stage of pregnancy, the intensity and impulse of the maternal pulsation may render the feeble fœtal sound inaudible; changing the position of the fœtus, and thus removing the pressure of the uterine tumor from the subadjacent arteries, will obviate this difficulty. During labor our examination should be made in the interval between uterine contractions. In protracted labors auscultation is of value in indicating to us the time for manual or instrumental interference, in order to save the life of the child. The indications of danger to the child are feebleness or excessive frequency of the fœtal pulsation, irregularity in its rhythm, absence of the second sound, its complete cessation during uterine contraction, and the slowness of its return in the interval; irregularity and feebleness are the most threatening to the life of the child. When the sound of the fœtal heart is heard, it is always a proof of pregnancy, but its absence is not positive evidence that pregnancy does not exist; for the fœtus may be dead, and in some rare cases the sounds may exist and be quite inaudible for a time, and then appear. This phenomenon is not easily accounted for.

Tumors of the uterus, whether developed on its surface, in its walls, or within its cavity, give rise to enlargements of the organ, which cause it to occupy a position corresponding to that occupied by a gravid uterus. The position and extent of these enlargements are determined in the same manner as we determine the size and position of the uterus in pregnancy. Deposits in its walls or on its surface give rise to nodules, which feel through the abdominal walls like hard balls, varying in size and shape, seldom occurring singly. The whole mass can usually be moved from one side to the other. The connection of these tumors with the uterus, as determined by the uterine sound, leaves little doubt as to their true character; and by this means we readily distinguish them from all other abdominal tumors.

Ovaries.—The ovaries in a normal state lie in the pelvic cavity, and their position cannot be determined by physical exploration; but when they become the seat of those forms of disease which cause their enlargement, and have attained such dimensions that there is no longer room for them in the pelvic cavity, they ascend above the brim of the pelvis, and occupy more or less space among the abdominal organs. As they pass out of the pelvis they are first noticed in the right or left inguinal region, according as the right or left ovary is affected, and they are then recognized as ovarian tumors. Often, before these ovarian enlargements have attained sufficient size to attract the attention of the patient, they will have reached a central position in the abdominal cavity. They are of more frequent occurrence than all other forms of abdominal tumors, and their existence is determined almost exclusively by the physical signs which they furnish.

Inspection.—In the early part of their development an uneven projection or prominence of one part of the abdomen will disclose the seat of the tumor, occupying usually the iliac or lumbar region of one side, and extending upward to or beyond the umbilicus; while in more advanced cases no irregularity will be visible, but the rounded form of the abdomen (while the patient lies on her back) offers a strong contrast to the flattened oval appearance of ascites, or the central rounded form of a uterus distended by pregnancy.

Palpation.—Ovarian tumors, when small, have a firm, elastic feel; but when large, they are soft and fluctuating. In some cases, by passing the hand gently over the abdomen, the extent of the tumor will be readily appreciated. At other times, the limits of the tumor cannot be ascertained by gentle palpation, for it occupies the whole of the abdomen, except the concavity of the diaphragm. In such cases, by making firm but not forcible pressure on various parts of the abdomen, we often detect at once a general sense of fluctuation, and ascertain inequalities which neither the eye nor the hand, when passed gently over the surface, will enable us to detect; and sometimes if the abdomen is not tense, we can feel masses which convey the impression of more or less flattened or spherical bodies attached to the inside of a fluctuating tumor. In some cases, the sense of fluctuation is very indistinct; in others it is even more evident than in cases of extensive ascites.

Percussion.—The sound elicited on percussion is flat over that portion of the abdomen where the tumor comes in contact with the interior surface of the abdominal wall; while at the side, and above where the intestines have been pushed aside and upwards by the tumor, the percussion sound will be tympanitic; by this change in the percussion sound we are enabled to mark out the boundaries of the tumor.

Differential Diagnosis.—Ovarian tumors may be confounded in their diagnosis with *uterine enlargements* (as pregnancy, fibroid tumors of the uterus, etc.), *ascites*, *hydatids of the omentum*, *fœcal accumulations in the intestines*, and *enlargements* of the *liver*, *spleen*, and *kidney*.

They are distinguished from pregnancy by a stethoscopic examination of the tumor, which reveals in the one case the sounds of the fœtal heart, and in the other their absence. They are distinguished from uterine tumors by their different consistency, by the difference in their outline, by the difference in their connection and relative position to the uterus, and by the fact that in uterine tumors the cavity of the uterus, as determined by the uterine sound, is always elongated. The diagnosis between ovarian and abdominal dropsy is made: 1st, by observing the difference in the shape of the abdomen when the patient lies on her back; ovarian tumors project forward in the centre, while in ascites the abdominal enlargement is uniform. 2d. In ovarian tumors the percussion sound is dull as high as the tumor extends, while at the same time there will be tympanitic resonance in the most depending portion of the abdominal cavity; in ascites the most depending portion of the abdomen is always flat, the percussion resonance being confined to the epigastric and umbilical region. 3d. In ovarian dropsy the relative line of flatness and resonance is not altered by change in the position of the patient, which is not the case in ascites. Hydatids of the omentum form a class of tumors which you will be unable by physical signs to distinguish from ovarian tumors. The fact, however, that these omental enlargements are first noticed above the umbilicus, and gradually enlarge downwards, while ovarian are first noticed low down in the abdomen, and gradually enlarge upwards, will in most cases be sufficient for a diagnosis.

Fæcal accumulations in the large intestines may be mistaken for ovarian tumors; the peculiar feel of such tumors (which has already been described) will, however, enable you to distinguish them from ovarian tumors.

Reports of Hospitals.

BELLEVUE HOSPITAL.

FRACTURE AT THE BASE OF THE BRAIN.

EXTENSIVE CENTRIC APOPLEXY; ANOMALOUS CONDITION OF PUPILS.

REPORTED BY CHARLES S. BULL, M.D., SENIOR ASSISTANT PHYSICIAN.

SERVICE OF DR. MCCREADY.

HENRY DE TOUR, aged sixty, married, a native of Canada, and by occupation an engineer, was admitted to Ward 14 of the Bellevue Hospital, Nov. 2, 1867, at 10 A.M. No history or facts of any kind were brought with the patient relative to his physical condition. He had been a night-watchman at the Academy of Music, and was found, early in the morning of admission, in an insensible condition.

On admission, the patient was comatose; his breathing was stertorous, his pulse 116 in the minute, and very feeble. His tongue was moist and slightly coated, and the surface of the body was cool. The right pupil was dilated, the left one contracted. There was some œdema of the lower extremities; and this, in connection with his comatose condition, had caused him to be sent to the medical side of the hospital, as a case of uræmic coma.

His wife stated that for some time back he had suffered from nausea and vomiting, and frontal headache, and she gave a pretty clear history of Bright's disease.

About a year ago he had been attacked with a convulsion, from which he soon recovered, and he had had none since.

Over the right temple was a large tumor, about the size of a small orange, bluish-black in color, and having three small cuts on its surface, none of which extended through the integument. The patient was grinding his teeth, and exhibited tonic contraction of the muscles of the extremities.

The urine, on examination, revealed albumen and hyaline, and granular casts. A diagnosis was made of coma from uræmic poisoning, and olei crotonis gtt. iij. were administered, but without the desired result, and the dose was repeated. The hot-air bath was then tried, in hopes of bringing on diaphoresis, but failed utterly; and notwithstanding all the means employed for his relief, the patient sank, and died at half-past three P.M. of the same day, the stertorous respiration and coma having continued until the last.

Autopsy eighteen hours after death. Rigor mortis well marked. On cutting into the tissues of the scalp, they were found to be infiltrated with blood. On separating the scalp from the pericranium, a large collection of coagulated blood was found beneath the tendon of the occipito-frontalis muscle, just under the point of external swelling. The temporal and occipital arteries of the right side were both ruptured, and their lacerated extremities could be dissected out amid the tissues of the scalp. No point of fracture could be detected over any portion of the vault of the cranium.

On removing the calvarium, the dura mater was found to be intensely congested, and a large amount of fluid blood was found between this membrane and the skull. There were no signs of inflammation to be detected. There was also considerable blood extravasated in the subarachnoid space. The brain was very much softened, so as to be removed with great difficulty. It was very much congested, and from the amount of blood found beneath the anterior lobes of the cerebrum, it was supposed that the anterior cerebral arteries had been ruptured. The arteries of the brain were to all appearances healthy, no atheroma having been discovered. On slicing open the brain, the entire right hemisphere of the cerebrum was found to be hollowed out; the brain substance apparently gone, as no trace of it could be found, and its place occupied by an immense clot of blood, filling all three of the lobes. A smaller clot, about the size of a pigeon's egg, was found occupying the anterior lobe of the left hemisphere.

An examination of the base of the skull revealed a stellated fracture of the petrous portion of the right temporal bone, commencing just over the internal ear, and extending about half an inch in various directions; but it did not reach across the median line.

The contents of the thorax were in a healthy condition. The abdominal organs were normal, with the exception of the kidneys. These were of the small, fibrous, contracted variety, weighing but five ounces together. The cortical portion had nearly entirely disappeared in both, and the left one contained a few small cysts.

The case presents several points of interest, which are as follows: 1st. From the presence of the clots, both pupils should have been dilated, whereas the left one was firmly contracted. 2d. Was the fracture found at the base of the skull produced by a fall while the patient was in a uræmic convulsion, or was it the result of a blow? 3d. The presence of a fracture at the base, while no lesion could be found in the vault.

Progress of Medical Science.

FIFTY-ONE CASES OF OVARIOTOMY.—Thomas Keith, F.R.C.S., gives in a recent number of the *Lancet* a tabulated statement of fifty-one cases of ovariotomy which he has performed, of which the following is a summary:

Of 51 operations, there were 40 recoveries and 11 deaths. The average duration of the disease was a little more than two years, and 28 had been tapped once or oftener before the operation. The youngest was 16, the eldest 68 years of age; 26 were married, 25 unmarried. Under 22 and above 52, all recovered. Of 16 above 45, all recovered save one. Of 5 cases in which both ovaries were removed, 4 recovered. The average weight of the tumors was 34 lbs.; that of the fatal cases 42 lbs. The smallest was a semi-solid mass of 7 lbs., in a case where a large cyst had burst a fortnight before. The largest was upwards of 120 lbs. A great part of it had to be dissected out. Its removal was the most formidable proceeding he was ever concerned in, and it is, so far as he was aware, the largest tumor ever removed successfully from the living body. Adhesions, if not in the pelvis, do not seem to him to influence much the result of ovariotomy. In the cases of single, or nearly single, unattached cysts, nothing could be simpler than the operation, and in several the cicatrix is now not more noticeable than the umbilicus. The majority, however, were extremely severe operations—in not a few extending over two hours; and the recovery of many was very remarkable. Only three were absolutely

unilocular cysts. In 9 cases the tumor was throughout semi-solid. All of these recovered save one. These tumors were cut into and broken up by the hand, and removed through as small an incision as possible.

Removing Particles of Foreign Matter from Eye.—Dr. E. M. Moore recently informed me of a method for removing particles of foreign matter from the conjunctival fold in cases where other means seem insufficient. It consists in scarifying the lid in the usual way, then closing the eye and allowing the blood to coagulate and entangle the irritating substances in the clot. When the latter is removed it brings away the foreign particles with it. This process was, I believe, originated and frequently practised by the late Dr. Munn, who, a few years ago, had a great reputation for skill and tact in the management of eye diseases.—Dr. C. E. Rider, *Rochester, N. Y.*

Mental Medicine.—At the meeting of the Academy of Medicine, September 17, 1867 (*Gaz. Hebdom.*), Dr. Lisle read a note upon the treatment of cerebral congestion and hallucination by arsenious acid. The conclusions of his paper are the following: "The insane often present symptoms of cerebral congestion. This is always the case with those laboring under hallucinations. Of one hundred and ninety-three of the latter, treated by arsenious acid, one hundred and thirty-one, or sixty-seven per cent., were cured, and twenty-seven experienced a marked and permanent improvement. Hallucination, hitherto considered as a symptom of insanity, is simply a complication nearly always grave. It is the most characteristic symptom of cerebral congestion. Arsenious acid is a remedy really specific in the disease. It is also very useful in cases of paralysis, incoherency, melancholia, etc., free from hallucinations, but presenting the evident signs of cerebral congestion. Arsenious acid, administered with prudence and watched with care, is one of the most inoffensive agents of the materia medica. The dose varies from five to sixteen milligrammes (one-thirteenth to one-quarter grain) administered three times a day at the beginning of each meal."

Large Aneurism of Femoral Treated Successfully by Compression of the Aorta.—Mr. Geo. Lawson (*Lancet*) reports a case of the above which occurred at the Middlesex Hospital. The patient was a stableman, thirty-six years of age, otherwise in good health. At first a Carte's compressor was applied to the femoral, but no cure resulting a resort was had to the compression of the aorta by Lister's compressor. The operation and its result are thus described:

On October 10th, at three o'clock P. M. (the bowels having been completely emptied by an enema), the man was placed thoroughly under the influence of chloroform. A Lister's tourniquet was applied over the abdominal aorta just above the umbilicus, and another tourniquet was placed firmly over the femoral artery just below the aneurism. Mr. Moore took charge of the tourniquet over the aorta, whilst Mr. Lawson kept his finger on the artery just above the aneurism, to watch if any blood passed into the tumor. The tourniquets were kept on for twenty-three minutes; only once at the end of the fourth minute did a wave of blood pass into the sac of the aneurism, when the tourniquet over the aorta was at once tightened; but for the remaining nineteen minutes absolute compression of the vessel was maintained, and no blood entered the tumor. The man became now somewhat collapsed, and began to retch. The tourniquets were then removed and the administration of the chloroform stopped. The pulsations in the tumor were diminished, but they were perfectly regular. It was, however, impossible to say whether the diminution of the pulsations were not due to the collapsed state of the patient. The man was returned to his bed, and the Carte's compressor readjusted over the artery. When the effects of the chloroform had completely passed off, he complained of coldness and numbness of the legs, with soreness in the belly. At seven o'clock in the evening, finding that all pulsation had ceased in the aneurism, the man himself removed the compressor. The house-surgeon was at once sent for, and he found that there was no longer any pulsation in the tumor. Since that time the man has continued to improve. With the exception of some feeling of soreness in the belly, which lasted for about thirty-six hours, the patient suffered no inconvenience from the treatment. October 17th.—The aneurismal sac is now felt as a hard oval mass; the artery which leads to it pulsates strongly, but all impulse ceases at the upper edge of the tumor.

Treatment of Scarlatina, by Dr. Dyes.—According to Dr. Dyes, the course of scarlatina depends entirely upon the intensity of the inflammation of the throat accompanying the exanthema, and which, being identical with diphtheritis, requires the same treatment as does the latter. He recommends chlorine water as the only effectual means to the end desired, and claims to have had abundant opportunity of convincing himself thereof in one hundred and sixty-three successful cases of diphtheritis, and five of scarlatina, in all of which the remedy was employed within the first five days of the disease. When gangrene had commenced, which is usually on the sixth or seventh day, the results were less favorable. The use of gargles of borax, alum, etc., is pronounced utterly valueless, as also the administration of chlorate of potassa, which, moreover, is always given in far too small doses. The author gives children under three years old the chlorine water diluted with one-third its bulk of water, to those between three and seven years old with one part in four of water, and above the age of seven, unadulterated. The frequency of its administration depends on the stage and the severity of the disease. During the first three days of the disease he gives a teaspoonful three or four times a day; afterward, according to circumstances—every two hours, or every hour. It is necessary to guard against the decomposition of the chlorine water. To this end it is essential that the dose be swallowed rapidly, as its efficacy is otherwise decidedly lessened; and also, that no other drink be permitted for some little time after. The author bases the efficacy of this method on the antiseptic and anti-miasmatic qualities of the chlorine, whereby the spores of a peculiar species of plant from which the diphtheria is developed, are destroyed. He also recommends the taking of small doses of chlorine water daily, as a prophylactic by those exposed to the infection of scarlatina.—*Deutsche Klinik*, 1867, *No.* 7.—*Zeitschrift für Medicin, etc.*

Concerning the Possibility of Galvanizing the Brain and Spinal Cord in the Human Subject. By Dr. Erb. (From a paper read before the Medical Natural History Association, at Heidelberg.)—One of the most important questions concerning the application of the galvanic current to therapeutical purposes is that of the practicability of reaching with this current individual portions and organs of the body. The possibility of thus reaching the great centres of the nervous system — the brain and spinal cord — is considered by Remak, Benedikt, Brenner, and others, as a matter of course; whereas, Ziemssen, in the last edition of his work on Electro-Therapeutics, declares himself deci-

dedly of opinion that these nervous centres cannot be reached either by constant or induced currents through any appliances at present employed in therapeutics.

As the settlement of this question is one of no little importance, Dr. Erb undertook a careful investigation of the same, and gives us the following results: As a test, various experiments were tried on the dead body, and they invariably proved that on application to the cranium of even weak, constant, and induced currents, these spread into the substance of the brain with such force as distinctly to contract the muscles of the frog's leg, the nerve whereof was in contact with the brain. One is thus led to the conclusion that it is thoroughly practicable to reach the encephalon through the cranium, with the appliances at present employed, and that in such cases the dizziness, deafness, distress, and faintness induced, are to be regarded as evidence of the direct excitation of the brain. Induced currents penetrate this organ with equal facility, but produce as trifling effects therein as they do on the retina, and other higher nerves of sense. In the spinal cord, where the relations of the superjacent tissues are somewhat different from those of the head, experiments have given the same result, viz. that by the ordinary application of the electrodes to the back, a constant current penetrates to the cord itself. Experiments on the living body leave scarcely room for doubt that by the changing or interruption of these currents a lively excitement is induced in the nerves lying within the spinal canal, and that thus the value of the application of electro-galvanic currents to the spinal cord is established. The author confirms former testimony to the effect that the constant galvanic current is the one to be preferred in treating affections of the great nerve centres.—*Heidelberger Jahrbücher der Literatur*, 1867. *Zeitschrift der Medicin, etc., Leipzig.*

Citrate of Soda in Diabetes.—The *Journal of Medical Chemistry* calls attention to a fact, which if confirmed, will be fruitful of the most important consequences. We refer to the property of citrate of soda, in causing to disappear glucose in diabetic urine. This indeed appears the result, from a good many experiments with the salt. It was administered in the dose of from 4 to 8 grammes a day, mixed with the food, as common salt.

What is its mode of action? It possesses this advantage over the *carbonate* of soda, that it will not interfere with the digestive functions, and it furnishes in a more efficacious manner the alkaline carbonate necessary to the chemical transformation of glucose. The experiments will continue.—*La France Medicale.*

Urachus Pervious after Birth.—Of this Dr. G. J. Townsend relates the following case: "I was asked to see a negro child, five days old, and was told that he was passing his water through his belly. The urine bubbled freely from the umbilicus every time the infant cried or made any great exertion. The cord had separated normally, and the child was in every other respect vigorous and healthy. There was evidently ulceration of the surface, left by the separation of the cord. The urethra was entirely pervious. The ulcerated surface was freely cauterized, and the edges of the opening were brought into close apposition, and kept there by a strip of adhesive plaster firmly applied in a longitudinal direction. This was still further secured by a compress of cord *covered* with wash-leather, and kept in place by being stitched to a closely fitting swathe. The patient was well in four days, when the swathe was removed.—*Boston Med. and Surg. Journal.*

Case of Intermittent Orchitis.—Dr. W. H. Morton reports a case of intermittent fever, to which he was called, and which yielded readily to quinine. In about ten days was again called to see the same patient, who had accidentally bruised his testes. At the time of the visit patient complained of severe pain in the left testis. The organ was hot, tender, and enormously swollen, presenting the ordinary symptoms of acute orchitis. Hot hop fomentations were ordered, the parts were kept elevated, and morphia was administered to quiet the pain. On the following morning the patient was very much better, but the same symptoms returned at the same time the following night, suggesting an intermittent tendency. He was ordered quinin. sulph. one scruple, to be taken during the intermission. The patient had no further paroxysms, and speedily recovered.—*N. Y. Med. Journal.*

Treatment of Intermittent Fever by Chloroform internally.—Six cases of intermittent fever are reported by Dr. Bricket, in the *Chicago Med. Examiner*, which were treated with chloroform, with the happiest results. In some of the cases quinine had been administered, but had not broken up the chills. In each case one drachm of chloroform was given, with the immediate effect of giving a quiet sleep of from 1 to 2 hours, and no further medication became necessary. The cases in which the drug was given were all uncomplicated, and the result was in the highest degree satisfactory. Further trial of chloroform in this disease is recommended.

Chloroform in Pernicious Fever.—In the *Richmond Med. Journal*, Dr. S. Eagon says: "My attention was first directed to chloroform administered internally, in 1860, by Dr. Fenner, of New Orleans, who had, prior to that period, employed it with very gratifying effects in several cases, as well as in the cold stage of ordinary intermittents, with like results. Dr. F. says: 'From the very prompt and happy effects experienced in the limited number of cases in which I have seen the remedy exhibited, I am inclined to regard chloroform, internally administered in the dose of from half a drachm to a drachm, repeated in the interval of 15 or 20 minutes, as possessing more potency than any other article of the materia medica, in bringing about reaction from the frightful collapse of congestive fever.' Having practised since 1860 in a highly malarial district, ample opportunity has presented itself of putting to the test Dr. F.'s assertion as to the value of chloroform in relieving the paroxysm of intermittent fever in the cold stage, and I am happy to be able to add, that in doing so I have had occasion to feel thankful to him for his valuable suggestion. The different medical journals bear testimony to the value of chloroform in intermittents in the cold stage. My own experience accords with the views expressed in these articles. I regard pernicious and intermittent fever as differing in degree only, and not in kind. Of the *modus operandi* of chloroform in relieving the cold stage, I have seen no explanation. It seems most plausible to suppose that a powerfully stimulating impression is produced on the stomach by immediate contact of the remedy, which impression is rapidly conveyed, chiefly through the medium of the nervous system, to the capillaries, exciting in this system of vessels remote sympathy. As to the prophylactic or antiperiodic power of chloroform, in intermittent fever, I am inclined to think it possesses no greater virtue in this way than is common to all narcotics."

Acute Idiopathic Glossitis, by Dr. J. B. Burnett, M.D., Bellevue Hospital.—A patient presented himself at the hospital, who within two months had had several returns of "a lump in the left side of the throat." A

week before admission he attended a picnic, at which he drank freely of lager beer. During the night he slept in a draught between two windows. In the morning his tongue was greatly swollen, hot and painful, and his throat sore, so that he could scarcely articulate or swallow. There was a profuse salivary discharge during the day. By afternoon the tongue almost completely filled the mouth, and greatly impeded respiration. The pain in the tongue was intense, and he was feverish, anxious, and restless. When admitted he presented the following symptoms: tongue swollen and hard, immoderate action of the salivary glands, glands beneath the jaw indurated, fœtor of breath, pulse nearly normal, skin cool, bowels regular, and urine normal. Treatment was gargles of potass. chlorat., ice to tongue, and saline purgatives. Diet, milk and beef tea. In about ten days patient recovered completely.—*Med. and Surg. Reporter.*

Steel Purse Ring Impacted in Naso-Pharyngeal Fossa for Thirteen Years and a Half.—Dr. William Hickman, M.B., F.R.C.S., relates in a recent number of the *British Medical Journal*, an interesting example of the long residence of a foreign body in this cavity. The child was two years old when the accident which resulted in the introduction of the ring occurred. While at play it was suddenly seized with a fit of choking produced by the ring with which the child was at the time nursed, and the mother thrust her finger in the throat, and after having felt it it disappeared, and she supposed it had been swallowed. The patient afterward suffered from symptoms of polypus, and it was only after the time referred to had elapsed that the existence of this foreign body was made out by a careful examination with the rhinoscope. An ineffectual effort was made to push the foreign body down into the mouth by means of an instrument introduced through the nostrils, but on this failing, guided by the history of the case and the appearance of the foreign body, the operator made a hook with a long probe bent into three curves, and passed it up behind the palate; and after some time and considerable trouble, and with the assistance of the forefinger of the left hand, he managed to pass the hook through the ring and bring this away on the probe. The ring was a wide steel one (completely blackened and rough from its lengthy sojourn), which had belonged to one of the old-fashioned long purses; it measured nearly three-fourths of an inch in diameter, and nearly half an inch in width.

Congenital Obstruction of Urethra.—A woman was delivered of a healthy-looking boy, on June 13, and next morning both were doing well. Meconium passing freely. By evening, child had had no urinary passage, but discharges from bowels frequent and thin. Upon examination, found the external meatus urinarius closed, as though it had united by adhesive inflammation, but no distension of urethra. The external orifice was opened with a bistoury, but no urinary discharge. The probe was introduced about four lines, and found obstruction, through which it was forced. The probe was passed four lines further, and another obstruction found, which required considerable force to pass. Finding no tumefaction over the bladder, it was concluded that the serum had passed off by the bowels without being secreted by the kidneys. The probe was carried through still another obstruction to the pubes. The instrument was then bent and passed, as was thought, into the bladder; but no urine followed. Next morning the child passed urine freely, showing that the obstructions had been broken down the night before. Had there been a free secretion of urine, the child must have suffered, and perhaps have died before the forty-eight hours expired, for it had been born that long before any urine was passed. The active condition of the child's bowels had prevented the secretion of urine. The child afterward did well, and had no difficulty in urinating.

An Inquiry into the Effects of Putrefying Organic Substances upon Living Animal Organism.—Dr. Schweninger, of Munich, thus sums up the results of injections into the blood, directly, the experiments being made upon seven dogs and twelve rabbits: "1st, The injection of putrid fibrin into the blood creates an increased temperature—fever. 2d. This symptom appears rapidly after the injection, yet not immediately, and seems sometimes to be preceded by a sinking of the temperature. 3d. The general infection is apparent from the affection of the intestines, disturbed nutrition, and the vehement attack upon the nervous system, tremor, vomiting, and great depression. 4th. The vehemence of the effect depends on the quantity of the fluid injected. 5th. Smaller animals are more affected than larger ones. 6th. The concentration and state of putrefaction are of no influence on the mode of operation of the injection. 7th. The effect is also brought about after fluids had been evaporated to dryness, if the experiment is made with the redissolved dry substance. 8th. The injection of filtered putrid liquids never creates metastases, or abscesses in the different organs of the body. Experiments with putrid gaseous emanations, although the animals were confined for several weeks in rooms highly impregnated with the same, produced no kind of morbid affections."

"If we compare the results of these experiments with those arrived at by Stick, Panum, and Billroth, by using various compound vegetable and animal putrefying substances, we find the same local as well as general changes, and the conclusion bears the highest probability that in all processes of putrefaction, either an identical or very similar active principle must exist. It is satisfactorily proven that products of the termination of putrefaction, such as ammonia, sulphuretted hydrogen, are not capable of producing the above-named pathological processes. Two hypotheses only are probable: either there is during the process of putrefaction one definite chemical substance formed—one specific poison of putridity—or else, organic substances in a state of putrefaction possess the property, not yet satisfactorily explained, of transferring and communicating their own elementary or chemical condition, resembling fermentation, to other bodies. This condition consists in locomotion or separation of the elementary components.

"Neither the degree of dilution, nor the duration of putrefaction, makes any difference in the modus operandi. Comparing this fact with the first of our hypothesis, it would follow that the most different substances would create the same chemical combination, and that it would preserve its character during all stages of putrefaction, an hypothesis which is contrary to the laws of chemistry as well as to the very principle of putrefaction. We must, therefore, adhere to the doctrine which considers putrefaction as a process analagous to fermentation, according to which putrefying substances transfer their own molecular motion to substances with which they are brought in contact, causing an increased formation of cells, or the reduction of the higher and normal organic forms to pathological ones, and lower chemical compounds. Very appropriately says Helmholtz: 'Putrefaction resembles the process of life in the sameness of the substances which they both occupy, in the capability of propagation, and the identity of condition by which either is preserved or destroyed.'"

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & CO. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, February 1, 1868.

THE ANNUAL REPORT OF THE SURGEON-GENERAL.

THE Annual Report of the Surgeon-General for 1867 presents us with some facts of interest in connection with the mean strength, health, and death-rate of the army up to the 1st of July last, besides giving assurances of the amount of work that has been accomplished during the time specified towards completing the medical and surgical history of the late war. The average annual strength of white troops is represented at forty-one thousand one hundred and four, and that of the colored troops as six thousand five hundred and sixty-one. The constant sickness rate among the former from all causes was fifty-eight per thousand, or less than six per cent., and the mortality about four per cent.; while in the latter the sickness was rated at five per cent., and the mortality, not counting deaths from epidemic cholera, at 3.9 per cent.

As regards the medical and surgical history of the war, we are assured officially that it is actively progressing. The immensity of the work, and the amount of care which it is necessary to exercise in order to give it absolute reliability, is such as will consume much time. Reports are being rapidly accumulated from all sources, compiled, condensed, and arranged with a method that is almost perfection; and if, at the end of each succeeding year, the same good account of labors can be rendered, the progress towards completion must be rapid, sure, and satisfactory. Already we are beginning to have foretastes of what is in store, in the publication of a catalogue covering thousands of pages of imperial quarto; of a sketch of the material on hand, in the famous Circular No. 6; and lastly by the appearance of one of the most elaborate and carefully prepared reports on amputations at the hip-joint which has ever appeared in any language. This latter report, giving an account of fifty-three of these amputations, covers eighty quarto pages, and the text is sprinkled with some of the finest executed chromo-lithographs that have ever appeared in any scientific work.

We are pleased to learn that the first volume of the history is already prepared for the printer, that the following ones will be issued as soon as practicable, and that all the necessary expenses for carrying on the work as far as completed, will be covered by the appropriation last made by Congress. The profession, especially those who have been engaged in the war, should see to it that their part of the work be performed. Many of these gentlemen now out of the service are no longer under official obligations to the department; but as men of science, they owe it to themselves and humanity to complete their cases, as far as they may be able, by reports of such of the ultimate results as may have transpired within the past two or three years. A great deal has lately been done in this line by the aid of Surgeon-Generals of the different States, and by pension officers; but there are still vast numbers of interesting operations which are waiting for such results as the lapse of a year or more can alone furnish. The citizen surgeon proper should also take sufficient interest in the undertaking to furnish the results of the cases of such discharged soldiers as may consult him either in hospital or private practice. The Surgeon-General has given the profession ample reasons for believing him in earnest as regards carrying out the grand design; and they should be ready and willing not only to endorse his endeavors by commendations, but second them by the more substantial aid referred to.

WE have received from the physicians and surgeons who have attended a second private course by Prof. H. R. Storer, of Boston, some resolutions which admit of a very curious, not to say ludicrous construction. They commence thus:

"*Whereas*, An unjust prejudice, founded, partly on ignorance and professional jealousy, and partly on a false conservatism, exists in the minds of many of our profession, against those who give special attention to the diseases of women; and, *whereas*, many of these diseases are either altogether ignored, or imperfectly treated of, in our text-books, and by the teachers of medical science in our schools; and, *whereas*, Prof. H. R. Storer, in instituting and carrying out, as he has done, a plan for the more thorough instruction of physicians on these important subjects, and in taking a bold stand as a Uterine Specialist, has incurred a certain degree of misrepresentation and abuse;"

Therefore it is resolved that the pupils, eleven in all, are perfectly satisfied that their teacher does not merit any such abuse as has been heaped upon him for taking such "a bold stand" as he has; that he is everything that a specialist should be; and, besides being thankful for the "candor and impartiality" with which he has discussed the subject, they intend in future to give him their earnest and hearty support. The question naturally enough comes up as to any just cause which these gentlemen have for unanimously adopting these resolutions. In the first place, we are not aware that the professor has specially incurred the enmity of his brethren for studying uterine diseases any more than

others who have perhaps labored equally hard in that particular department. Secondly, even if the contrary were true, we hardly think that the resolutions of a few admiring pupils would have any particular weight with the profession at large, as they cannot of necessity be considered an impartial jury. The whole affair seems to be a very poor excuse on the part of the members of the said class, whose names and residences are carefully added, to advertise themselves at their teacher's expense. It is of course very gratifying to a teacher to secure the approval of his students, but we think that the latter should hardly deem it necessary to request that such an endorsement should be considered of sufficient importance to be sent to the medical press for publication.

It is to be hoped that Prof. Storer, if he has it in his power, will in future strive to curb the enthusiasm of his pupils to the extent of preventing them from begging for him the place of a martyr.

The following published letter, clipped from the *Army and Navy Journal*, New York, December 28, 1867, is commended to the careful consideration of every gentleman who contemplates entering the Medical Corps of the United States Navy:

Naval Lists.—*To the Editor of the Army and Navy Journal*,—Sir:—It is about time to notice the ridiculous way in which lists of officers of naval vessels and stations are inserted in the public prints. The New York *Herald*, of the 18th instant, has a list of officers of the *Piscataqua*, in which the line officers are ignorantly inserted after the "fleet and general staff." The impropriety of such an order of naval precedence is manifest, and cannot be defended on the ground that in lists of Army officers the field and staff have always been placed before the line. An army rule is no authority for infringing a naval custom, or else it might be urged that because army paymasters, engineers, etc., have always had rank *de facto*, in the Navy they should be styled lieutenant-commanders or majors.

Fortunately, the Navy proper is not so democratic as the Army, and they will continue to jealously guard their titles and order of precedence against the absurd pretensions of inferior branches of the service.

Honor.

The assumption of superiority claimed by the line officers under *all circumstances*, as portrayed in "Honor's" communication, exhibits a spirit of intolerance and illiberality unworthy of the age; and is a gratuitous indignity not only to the medical staff of the navy, but to the profession throughout the country.

It appears by the recent elaborate report of the Bureau of Medicine and Surgery, that there are at present about fifty vacancies in the Medical Corps of the Navy. When it is known that Congress has omitted to recognise the services of the Staff Corps by increase of rank and pay, while it has created four additional grades to reward the line, it is fair to presume the vacancies will augment rather than diminish.

Reviews and Notices of Books.

Transactions of the Medical Society of the State of Kansas, for the Year 1867.

This volume contains the proceedings of the Kansas State Medical Society, at its third annual meeting, held in Leavenworth, April 3d and 4th, 1867, with a list of members, the address of the president, C. A. Logan, M.D., of Leavenworth, and a number of papers, including reports of committees on Surgery, Obstetrics, and Climatology; on the Application of Water, and its effects as a local agent, by J. L. Prentiss, M.D.; on Diphtheria, by J. W. Brock, M.D.; on Poisoning by Arsenic, and on Persulphate of Iron as an Hæmostatic, by John W. Parsons, M.D.; Femoral Hernia, by R. Morris, M.D.; The Malarial Miasm pervading Non-malarial Diseases, by Charles C. Shoyer, M.D.; and on Infantile or Oblique Fracture of the Vertebra, by W. E. Turner, M.D.

Dr. Prentiss applies water locally, by means of a narrow tubing of light rubber of proper length, coiled in the form of a lamp mat to the desired dimensions, and retained in shape by means of light cords, one end of the tube extending from the centre of the coil and dipping into a pail of water, the other end extending from the periphery, with a stop-cock attached, to the waste-pail.

The cases of poisoning by arsenic were treated successfully by vomiting, by sulphate of zinc and the free administration of the subcarbonate of iron, which Dr. Parsons believes to be as efficient as the hydrated peroxide, mixed with water as thick as cream.

Dr. Charles C. Shoyer finds that in Leavenworth there is a periodicity complicating non-malarial diseases, and necessitating the exhibition of quinine.

We congratulate the members of the profession in Kansas upon their enterprise, and trust that they will not fail in the sphere of medical organization.

Medical Communications of the Massachusetts Medical Society. Vol. XI. No. 1. 1867.

This volume contains the proceedings of the Councillors of the Society, on October 3, 1866, February 6, 1867, and June 4, 1867. At the meeting, on the reading of a letter from S. Eliot, Esq., on the part of the Trustees of the Massachusetts General Hospital, requesting an expression of opinion as to the expediency of admitting females, as students, to visit the wards of the hospital, after a full debate it was

Resolved, That in the opinion of the Councillors of the Massachusetts Medical Society, it is inexpedient to admit females as students to our State medical schools and hospitals. 49 yeas, 7 nays.

Then follow the proceedings of the annual meeting of the Society, held at Boston, June 4, 1867, with a list of officers of the Society, and of the District Medical Societies, and a catalogue of Fellows.

Quite a number of papers on interesting subjects were read, but they are mentioned only by titles and authors. Obituaries of eight deceased members are printed in the communications. The annual address was on "The Duties of the Medical Profession," and was delivered by the orator for the year, Horace P. Wakefield, M.D., of Reading. It is a very animated address, advocating professional intercourse as a means of preventing disagreement among doctors, raising the standard of medical education, and warning the community against the errors of the day, such as the resort to criminal abortion, the use of alcoholic stimulants as beneficial in a state of health, and holding in grateful remembrance the good deeds of deceased professional associates.

On Ligation of the Funis. By A. F. A. King, M.D. Washington, D.C. 8vo., pp. 87.

This pamphlet details a number of arguments supported by clinical records, in proof of the proposition that ligation of the umbilical cord at child-birth is unnecessary, often injurious, and occasionally actually fatal to life. We shall give a good idea of the plan and scope of the argument by quoting the author's conclusions, as follows:

"1st. That ligation of the umbilical cord in the human infant is *unnecessary*. This for the following reasons:

"*a.* Because the operation is not required at the birth of any other animal.

"*b.* Because the imagined necessity for it (viz. to prevent hæmorrhage) does not exist, as distinctly appears from a knowledge of the formation of the cord, and of the structure of its component vessels; as well as from the numerous recorded cases in which no ligature was applied, and yet no fatal bleeding followed.

"*c.* Because to ligate for cleanliness' sake is superfluous.

"*d.* Because it is unreasonable to attach to the process of reproduction in women so glaring an imperfection, as that the birth of a single child cannot be safely completed without a strand of thread upon the umbilical cord.

"2d. That ligation of the umbilical cord at child-birth is in many cases *injurious*. This for the following reasons:

"*a.* Because, as shown in the text, it may justly be considered as the cause of *secondary hæmorrhage* from the umbilicus.

"*b.* Because by preventing that flow of blood which should naturally take place from the umbilical vein, and thus giving rise to congestion of the liver, it produces *infantile jaundice*, and probably also causes *sclerema*.

"*c.* Because, by interfering with desiccation of the cord, and thus preventing its separation, it gives rise to *ulceration of the navel*, and, as a not unfrequent occurrence, *erysipelas*, *fungoid excrescence*, etc.

"*d.* Because, by maintaining the funial vessels in a state of congestion and distension from unnaturally retained blood, it causes the *inflammation* of these vessels, and also hinders their normal *obliteration*, thus laying the foundation for *umbilical phlebitis*, *erysipelas*, *jaundice*, *pyæmia*, etc.

"*e.* Because, by preventing a normal escape of blood when the cord is divided, and thus causing hepatic hyperæmia and congestion of the portal circulation, it may lay the foundation for that innumerable list of fatal infantile affections which so often appear to originate in congestion of the portal blood-vessels.

"3d. That certainly in *some*, and probably in *not a few*, the operation of ligating the funis has been directly fatal. This for the following reasons:

"*a.* Because numerous cases of death, in which the fatal result was ascribed to ligation, have been recorded by the highest obstetrical authorities.

"*b.* Because, it can be seen how the operation in the cases of still-born children maintains the right ventricle in a state of distension (otherwise relieved by bleeding from the hypogastric arteries), and thus effectually prevents the renewal of the heart's action when it has stopped; or renders the stoppage complete when it is about to cease.

"*c.* Because, in many instances, the removal of the ligature has saved the life of the infant, *when all other remedies* had failed."

As to the management of the cord, our author recommends that the cord be divided with a dull pair of blunt-pointed pocket scissors, hacking through the cord, not at one cut, but by a sort of nibbling process; and he thinks a small pocket *écraseur* would be the best instrument for the purpose; if it should bleed too much—an occurrence which has not yet happened to the author—then the cut end may be scratched, scraped, and pinched between the thumb-nail and end of the index finger, until the hæmorrhage is controlled.

The author objects to dressing the cord, because it interferes with the process of desiccation, thus prolonging the period of separation; and gives pain (often mistaken by nurses for colic) by fixation of the distal end in contraction, and thus pulling the funis from the navel. In conclusion, the author claims that "the advantages of this mode of management are, that desiccation and separation take place rapidly; that pain to the child is avoided; that the risk of ulceration, inflammation, and erysipelas of the navel is lessened; and last, but by no means least, the accoucheur can in one moment, by simply raising the skirt, easily examine the umbilicus at every visit, without at all incommoding the infant, or even waking it, if asleep. This last is an advantage which every obstetrician who has witnessed the cries of the infant when undergoing examination of, and removal of dressings from the umbilicus, must, I think, appreciate."

We are unable, at present, to pass judgment upon the argument in this essay, having always adhered to the time-honored custom of ligation and dressing; but we cheerfully recommend the perusal of the pamphlet, and will leave it to obstetricians to learn if they have been taking unnecessary measures from before the days of Hippocrates. Did Eve tie Cain's funis?

The Physicians' Hand-Book for 1868. By William Elmer, M.D. New York: W. A. Townsend & Adams. 1868.

This hand-book of practice, which has met with such a favorable reception with the profession in many parts of the country, enters upon its eleventh year of existence. Its distinguishing feature, as many of our readers are aware, is the detailing of the symptoms and treatment of the various diseases met with in practice, combining the advantages possessed by an ordinary hand-book of medicine with those of a record of practice. As far as it may serve to refresh the memories of practitioners who may be called to difficult cases in an emergency, and where prompt action is required to save life, it is calculated to subserve a very good purpose. As to the general arrangement of the rest of the work, it is excellent in its way, but for our own uses we should prefer one which could be commenced at any time in the year.

Comfort for Young Anatomists.—"During my attendance at the Windmill Street school, I worked hard in the dissecting room, and learned a good deal of anatomy. If I did so, however, it must be owned that it was rather as a duty, and because it was necessary to my future undertakings, than because I had any particular taste for the details of anatomical study. I remember some years afterwards dining with a friend, who was a craniologist, at the Athenæum, when he told me that he saw that I had the organ of constructiveness much developed, and that this explained how it was that I excelled in the use of my hands, and was an excellent dissector. There was never a greater mistake. I was naturally very clumsy in the use of my hands, and it was only by taking great pains with myself that I became at all otherwise."—*Sir Benj. Brodie's Autobiography.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Nov. 27, 1867.

DR. B. H. SANDS, President, in the Chair.

DR. CUTTER stated that since the last meeting he had asked Dr. Ward more particularly concerning the case of supposed gun-shot wound of the stomach, and that gentleman informed him that there had been vomiting of blood.

He then presented three photographic representations of skin disease for which he was indebted to Dr. Ward: one of these was a beautiful specimen of leprosy, and the other two were cases of elephantiasis. They were taken from subjects in Hong-Kong.

EXSECTION OF RADIUS.

He also exhibited a portion of the radius which he had exsected a week before from the arm of the daughter of a physician in Newark. The patient was of a scrofulous habit, and had been afflicted for a number of years. Three fingers of her left hand had been removed previously for necrosis, besides two or three operations upon the arm. The father stated that after these operations there had never been any effort at repair. He preferred in consequence of this to have the whole enlarged portion of the bone removed along with the sequestrum. The incision was made in the long axis of the limb, and the section made with the chain saw. The wound healed by granulation.

The specimen consisted of an expansion of bone, in the centre of which was a small splinter of necrosed bone.

DR. KRACKOWIZER asked why the opening in the involucrum had not been enlarged and the sequestrum removed.

DR. CUTTER remarked that the patient's father wished the whole removed.

DR. KRACKOWIZER believed, inasmuch as the sequestrum was entirely loose in the cavity of the involucrum that the necrotic process had ceased—the strongest possible argument in favor of enlarging the opening and removing the dead bone.

DR. CUTTER stated that he should have preferred to do so, but was overruled by the patient's father.

THE EFFECT OF ACUPRESSURE ON ARTERIES.

DR. HUTCHINSON exhibited the right and left carotid arteries of a sheep that had been cut for the purpose of ascertaining the method of closure of vessels when acupressure was employed, and the time required to effect such a result. The first vessel was cut on the 1st of November, the other on the 13th; the animal being killed yesterday, and both arteries removed.

The left carotid was the first one cut. It was exposed, and an acupressure needle used according to Simpson's fourth method. When this was applied to the artery, the vessel was cut above, and as was expected, there was hæmorrhage from the distal end. The needle was immediately applied to that side of the artery, with the effect of at once controlling the hæmorrhage. The wound was then brought together with sutures. At the end of forty-one hours, both ligatures were removed and no bleeding followed.

The same operation was done on the opposite side, as already stated, on the 13th, and the ligatures were likewise removed on the forty-first day with a like result. Dr. H. remarked that he had intended to have removed them earlier, but was prevented from so doing by being called away to the country.

"In looking at this specimen," said he, "it will be observed that there is no clot in the left carotid, either on the distal or cardiac side, that the vessel is completely closed at its mouth, and perhaps a little contracted there. On making an examination, I found the cellular tissue and sheath of the vessel connected very firmly with the extremities of the artery; the nerve was also imbedded in the mass; the vein was agglutinated, but easily separated. On the opposite side the same condition existed. It will be seen that the artery on this side was considerably larger than on the left, for the reason doubtless that the latter was first tied, and there was in consequence a greater volume of blood in the other. There are also in this vessel (right) two clots of a purplish color; one of them by accurate measurement was five-eighths of an inch, the other three-eighths of an inch in length; one of these was pyramidal at the top, the other was not. These clots were very slightly adherent to the vessel. The vessel has been laid open entirely to its mouth, which appears to be occluded by organized lymph."

He stated that the first experiment that he performed with acupressure was upon the dead subject. It was made by amputating the thigh, and afterward by introducing the nozzle of Davidson's syringe into the common iliac artery. A strong man then pumped into the vessel with sufficient force to throw a stream through the severed end of the femoral for a distance of five feet. No difficulty was found in arresting this flow by the application of the acupressure needle.

Since the experiments upon the sheep, he had performed two upon the living subject. One of these was upon a little girl whose leg was reamputated. The first operation was necessitated by the occurrence of a railroad accident, causing a compound comminuted fracture of the leg. The flaps, however, sloughed, and the bone protruded. The second operation was performed on the 7th of November by Dr. Enos, with whose permission Dr. Hutchinson employed acupressure. Four needles were applied in this case. During the amputation, the patient suffered very much from the effects of ether, and the vomiting which resulted was kept up more or less for forty-eight hours. The hæmorrhage was, however, entirely arrested by acupressure. Soon after she was put to bed, a little oozing took place after a vomiting spell, but this was only a reddish serum. The stump was accurately closed with silver sutures, but, on account of tension which soon after occurred, they were loosened forty-eight hours after the operation, when the needles were also removed. There was union by first intention throughout the whole of the wound, except about half an inch in extent.

The second operation was performed the day before the meeting, after a reamputation of the foot at the tarso-metatarsal articulation. A portion of the foot was amputated some months ago; but when the parts healed, the metatarsal bone of the little toe was found to project, and that of the fourth toe being also left, caused such a great inconvenience that the second operation had to be performed by removing the parts higher up. Five needles were used, and, in addition to these, persulphate of iron had to be applied to one of the surfaces of the bones which broke off at the articular surface. It was also necessary to apply a ligature next to the bone, and one was accordingly dipped in carbolic acid, tied, and the ends cut off short. The edges of the wound were drawn together with metallic sutures, and the acupressure needles were removed twenty-two hours after the operation. In removing the last needle, which was from the dorsalis pedis artery,

a little oozing took place, but it was only for a moment. The patient at the time of reporting the case was comfortable, and the wound looked well.

Dr. Markoe stated that in conjunction with Dr. Van Buren he had made two operations with acupressure. In both instances the needles were left in for three days, not knowing at the time that they could be taken away earlier. The wounds were large and the needle occasioned considerable stretching, followed in both cases by inflammation and suppuration. The hæmorrhage in both was promptly arrested, but in consequence of the irritation of the needles and the deformity they occasioned at the line of the flap, he had abandoned their use. These operations were made shortly after Prof. Simpson first proposed his method.

A QUESTIONABLE TUMOR OF THE JAW.

Dr. Krackowizer presented a specimen of tumor of the jaw which he had removed from a lady 35 years of age. It was situated in the region of the right parotid. About 18 or 20 years ago the patient, while still unmarried, was said to have had a similar tumor of smaller size, which the family physician who attended her, and who also assisted in this operation, removed. That gentleman said that he had good reason to believe that there had been some portion of the tumor left, for after the wound had healed the disease reappeared. The tumor, however, grew very gradually, and was never painful so long as it was small. It was lodged between the mastoid process and the ramus of the maxilla, and only by its presence occasioned an inconvenience during mastication. But when it increased so as to lift itself out of the sulcus pain began to show itself, and the annoyance of its presence was much increased. The skin overlying it was loose, and the old cicatrix was not adherent. It was removed by a longitudinal incision without any difficulty. A part of the parotid gland immediately in contact with it seemed to be atrophied by pressure.

On removal it appeared to be made up of nodules, but principally of two sets, the larger being lodged behind the ear, the other in front. These nodules seemed to be prolongations of the substance of the tumor. It was not homogeneous in structure, as some parts were hard, others soft, and some elastic.

Concerning the microscopical appearances of the tumor he begged leave to report at the next meeting. He had only thus far examined two specimens, but in these he was somewhat disappointed in what he had found. He had supposed it to be an adenoid tumor, but on microscopic inspection there was discovered a rich stroma of elastic fibres, in the interstices of which were nests of cells, the latter having small nuclei. They seemed to drop out of their places very easily, and flow in larger or smaller masses over the field of vision. But besides these, he found other nests of different sizes, which were composed of caudate or fusiform-shaped cells, which formed themselves into layers.

The aspect of the tumor, as well as its history, forbade the conclusion that it was malignant; still the microscope made some rather significant disclosures.

NECROSIS IN POPLITEAL SPACE—NECESSITY OF EARLY PROBING, ETC.

He next exhibited several pieces of dead bone which had been removed from the popliteal space of a boy 10 years of age. The patient's troubles began with the symptoms of osteo-myelitis about the middle of March. He saw him in consultation about the first week in April. One of the leading surgeons of this city had seen the patient in consultation before, and being over-conservative, had declined to open an abscess that then existed. When Dr. K. saw him the acute symptoms had passed off, and he found the knee-joint intact, the hamstring muscles shortened, the leg semiflexed on the thigh, and the lower half of the right thigh swollen, with deep fluctuation evident everywhere. An incision was made about two inches above the upper end of the patella, and a little to the inside, where fluctuation was most marked. The liquid which escaped was perfectly clear serum, except a few shreds of coagulated fibrine, and some accumulated pus globules. The finger being introduced into the opening, could be swept to the inner circumference of the thigh bone, which was denuded on its internal aspect, near and above the knee-joint.

The boy was afterward sent into the country, and returned in September. There were then two separate sinuses on the inside of the knee-joint, about two inches from each other. The probe introduced passed outward and posteriorly, and grated against dead bone. Bearing in mind the condition of things when the incision had been made, he determined, in order to get easy access to the dead bone, to make an opening between the insertions of the vastus externus and the short head of the biceps. The result was such as had been desired, and the four pieces of bone presented were removed without difficulty. The necrosis did not extend into the medullary cavity, but seemed to confine itself to the cortical portion of the bone.

He remarked that it was always of the utmost importance in such cases, after making an incision, to institute a thorough examination into the extent and situation of the denuded bone. In this case, if this had not been done, and the sinus taken as a guide for the operation, the route for the pieces of dead bone would have been much longer, and might have involved some of the large vessels in the operation.

NEW YORK MEDICO-LEGAL SOCIETY.

Stated Meeting, January 7, 1868.

Dr. Thomas C. Finnell, President, in the Chair.

APOPLEXY OF THE MEDULLA-OBLONGATA.

Dr. Terry gave the details of an autopsical examination, which he had conducted in connection with Dr. John Beach, with a view of ascertaining the cause of death in a child, five days old. The history as given by the mother was, that the child after crying almost incessantly for two days became quiet, was laid to rest at 10 P.M., and found dead at midnight. They found the abdominal and thoracic viscera healthy. The membranes of the brain were strongly congested, and in the ventricles there was a sanguineous fluid. They were then about to abandon the investigation, when it was suggested to examine the base of the brain, but without any expectation of discovering any lesion. The brain was accordingly taken out and very carefully opened. Dark coagula were found along the *medulla oblongata*, extending from the *crura cerebri* to the region of the third or fourth cervical vertebra. The clot was lying anterior, under the *dura mater* and external to the *arachnoid* membrane. He mentioned the case by way of illustrating the necessity of thorough autopsical examinations, since here both the extreme infancy and the absence of preceding symptoms scarcely suggested a suspicion as to the real lesion.

Dr. John Beach was well satisfied that such verdicts as died from "*convulsions*," "*suffocation*," "*asphyxia*," etc., were merely empirical, and expressed no scientific truth. Still, as we advanced in knowledge these verdicts would of necessity be gradually replaced by others. But we could not expect to advance the interests of our science by hasty or slovenly examinations, which

too often confirmed the habit of jumping at conclusions not at all warranted by the facts.

DR. CHADSEY recollected a child only thirteen hours old, who, after having nursed only five minutes before, suddenly died.

DR. TERRY, in reply to a question of Dr. Wooster Beach, said that the spinal cord had not been examined.

DEATH FROM EMBOLUS IN THE PULMONARY ARTERY.

DR. TERRY related a case of sudden death in a man of middle age, who had been complaining of pain in the chest, with slight difficulty of breathing, extending over a period of two weeks. The post-mortem examination revealed very slight congestion of the lungs, conjoined with a general hypostatic condition of the whole organ. The right lung, however, he noticed seemed abnormally firm and resilient, without being absolutely diseased. This condition of things induced him to look more closely into the circulatory system, when, on slitting open the pulmonary artery, he found a large embolus extending into the lungs. He would inform the Society that the cranium had been duly examined, as well as the remaining viscera, and had been found to be healthy.

DR. R. NEWMAN asked whether the embolus was the real or immediate cause of death.

DR. TERRY said that there were in the heart fibrinous clots which were externally red, but internally of a paler color. These clots were decidedly fibrinous.

DR. FINNELL said that this question, as to the real cause of death in the present case, was scarcely to be regarded as certain. Very few of us are accustomed to examine into the condition of the arteries, and, of course, a comparison of experiences could not be expected.

DR. JOHN BEACH alluded to the fact that this man had been in charge of a physician for two weeks, and was able to be about; at all events, his case did not seem to be regarded as critical.

MAY COMPRESSION OF THE BRAIN AND A CERTAIN AMOUNT OF INTELLIGENCE CO-EXIST?

DR. WOOSTER BEACH referred to the case of a man found dead in his cell. He had been brought into the station charged with being intoxicated, and when questioned by the captain of the Precinct, was able to return intelligible answers. According to the testimony elicited at the inquest, he had left his wife comparatively sober. The autopsy demonstrated the fact of a somewhat star-shaped wound of the scalp, situate just behind and above the ear, with an indentation of some depth at the junction of its several limbs. This did not lay bare the skull, although the existence of a fracture involving the petrous portion of the temporal, the parietal, and sphenoid bones was demonstrated. There was likewise found a clot so large, that it depressed the substance of the brain three-fourths of an inch. This man had been examined and sent to his cell by the police officials without there being a suspicion of any grave injury, much less does there seem to have been any attempt on their part to discriminate between intoxication and compression. A point of some medico-legal interest here comes up for consideration, Was this man "*clubbed?*" For his own part, he thought that it was probable that the deceased had fallen against the sharp corner of a stone step, as the wound from a club was usually in a straight line. Then, again, the wound was evidently quite recent, since the victim gave a coherent account of himself.

DR. O'DEA suggested that the clot might have been the result of a reactionary hæmorrhage.

DR. JOHN BEACH could hardly subscribe to the opinion that the clot had been only recently formed, and related a case in illustration of the amount of compression which might be borne by the brain, without interference with its function. The instance in question was that of a man who had walked continuously from Weehawken to Avenue A, with the exception of the time consumed in crossing the ferry, and then lived twelve hours with a similar clot on his brain. In this case the dura-mater was not injured.

DR. STIRLING suggested that the wound might possibly have been caused by a thrust with the butt-end of a club. He condemned the careless examinations of persons found in the streets, and thought that these unfortunates were entitled to the common rights of humanity. Of course, he would not say that such examinations were usual, but that they were much too frequent.

CAUSES OF SUDDEN DEATH.

DR. R. NEWMAN, in opening the discussion upon the causes of sudden death, said, that in using the term "sudden," he did not desire to be understood as meaning *instantaneous*, but that he would start with the theory that a few hours have elapsed. He then classified the causes under the following general heads:—

Internal, under which might be embraced such lesions as have been caused by the decay of parts, such as the rupture of vessels consequent upon atheromatous deposits. Familiar examples of this form are to be found in aneurisms. Besides these might be cited ruptures of the uterus, hæmorrhages within the thorax. The heart may also be cited as being frequently at fault, the lesions being rupture of its walls, and the fatty molecular degeneration of Quain. To the cranial cavity also many a death is referable; being caused by the extravasation and effusion of blood at base of the brain, etc.

External causes comprise external violence, the administration of poisons, foreign substances within trachea, suffocation by hanging and otherwise, etc.; shock to the nervous system, paralysis of an important nerve, piercing of the medulla oblongata, as practised by Bernard upon the lower animals, or in Cuba in the "garroting" of malefactors; nervous collapse after parturition, strokes of lightning, which last he supposed paralyzed the nerves by an overdose of electricity.

DR. FINNELL added another cause, the rupture of the *cordæ tendineæ*, which allowed the valve to flap back, and act as an obstruction.

DR. H. RAPHAEL also alluded to another cause, which he designated as from exhaustion, and as an instance cited the case of a patient who, having advanced to the twenty-first day after an amputation of the thigh through its middle, fell back in bed dead.

DR. O'DEA stated that the famous Dr. Pereira died suddenly, and his heart was found to have been quite flabby and soft. Dr. Abercrombie, of London, had also died from a fatty heart.

DR. WOOSTER BEACH was of opinion that this condition of fatty heart—which term he used in its accepted professional sense—was after all quite frequently a mere coincidence. He thought that when no other ostensible cause of death could be detected, medical men were too apt to betake themselves to that phrase as a refuge. He would not say that it was not a cause, but that statistics put the number of deaths from that cause at a figure much too high.

DR. FINNELL objected to Dr. Beach's view, as not being sufficiently specific.

DR. CHADSEY said that laboring men, when they did die from any cardiac disease, were apt to fall victims to ossification of the valves, while the intemperate, and

those able to live without work, died from "fatty degeneration."

Dr. Terry ventured the theory that death from lightning was due to an induced opposite electrical condition of the body, which paralyzed the nerves.

Dr. J. Beach had observed that the unacclimated furnished the greatest number of victims to sun-stroke. He had noticed, too, that in the case of those dead from either lightning or sun-stroke there was a purple hue on the countenance, and a great tendency to decomposition, which was quite rapid in progress. This condition of things he attributed to the great congestion of the whole capillary system.

The meeting then adjourned, with the understanding that the discussion be resumed at an early date.

ALBANY COUNTY MEDICAL SOCIETY.

Stated Meeting, January 18, 1867.

The President, Dr. R. H. Sabin, in the Chair.

Dr. J. S. Mosher reported a case of poisoning from *Cicuta Maculata.*

Some boys living just south of Albany were out in early spring digging and eating roots in the woods. They were taken suddenly and seriously sick, and one of them died; the others being saved probably by the prompt and efficient treatment of Dr. Wendell. A specimen of the root was brought me by him, and it proved to be the *Cicuta Maculata.* It had evidently been mistaken by the boys for the fragrant *Osmorrhiza Longistylis* (Sweet Cicely). It is one of the most poisonous plants that grow, and, unfortunately, but little known. The Shaker packages of Conium Maculatum are labelled Cicuta, and several of our best works on materia medica make no distinction between the two plants.

The Conium Maculatum, or Spotted Hemlock, is common, growing by roadsides, and is familiar to all. The genus Cicuta is represented in this country by two species, the C. Maculata, or Poison Hemlock, having two or three tuberous roots as large as the little finger, and C. Bulbifera. The C. Virosa, or Water Hemlock, is a European species, with a single large tuber, sending out a number of rootlets, and has been long known as one of the most deadly poisons. These are cerebro-spinal poisons, acting the reverse of strychnine, which has been suggested as an antidote for them. The best treatment seems to be to free the stomach by emetics, and then support with stimulants. The Order Umbelliferæ, in which these are found, also furnishes many useful plants. It is most widely known by its garden and field varieties. The caraway, carrot, parsnip, and celery, are familiar examples.

From the ignorance of the botanical character of these plants arises also ignorance of their chemical and toxicological character. There is much ground for interesting investigation in these plants. I have several of them in my garden, and intend to become better acquainted with their properties. The terrible character of the cicuta, and the complication of names which confuse it with conium, so common in medical use, are worth our serious attention.

Dr. Stevens remarked that although the Cicuta Maculata and C. Bulbifera are natives of all sections of our State, they are not very common, and hence are not generally known even by medical men. They inhabit swampy meadows and the borders of marshes, and are usually surrounded by tall grasses. Both species have marked characteristics, and if once recognized, need never afterwards be mistaken. They have finely divided leaves and white flowers; the C. Bulbifera has little bulbs in the axils of the leaves. A peculiarity of this order is that, as a rule, the plants growing in wet places contain an acrid narcotic poison, while those growing in dry places are harmless. The Cicuta Maculata and Æthusa (Fool's Parsley) are examples of the former class; the carrot, parsnip, sweet cicely, and caraway, of the latter. People should be warned to avoid all plants growing in wet places and which have umbrella-like inflorescence.

Dr. Stevens reported a case of extrophy of the bladder with an improved instrument for its relief. The bladder stood out upon the abdomen like a large tumor, raw and bleeding. The penis was a little more than an inch long, and imperforate, and the ureters opened between the bladder and penis.

Correspondence.

MEDICAL MATTERS IN PARIS.

(from our special correspondent.)

To the Editor of the Medical Record.

Sir—Before the Academy of Sciences, M. Sappey presented a note announcing the existence of nervi nervorum, or nervous filaments, in the neurilemma of nerves, analogous to the vascular ramifications in the coats of blood-vessels. The distinguished anatomist has followed these filaments as far as the sheaths enveloping the secondary trunks of nerves, but they are never found in the envelope of primitive fascicules. The internal envelope of the optic nerve receives no nervous filament. The external, on the contrary, receives a number from the ciliary nerves. This external sheath is also remarkable for the abundance of elastic fibres which enter into its composition. It therefore differs notably from both the sclerotic and the dura mater, which are deficient both in nervous filaments and elastic fibres.

THE CURVATURE OF THE SPINE AND THE OSSIFICATION OF THE RIBS.

M. Sappey is the Chef des Travaux Anatomiques, and has just reopened his popular course at the École Pratique. At a lecture at which I had the pleasure of "assisting" the other day, M. Sappey referred to two points which had been the object of some recent personal researches, and may not, therefore, be well known to you. One was an explanation of the curvatures of the vertebral column by the obliquity, in the cervical region, of the intervertebral disks, in the dorsal, of the bodies of the vertebræ, and in the lumbar, of both bodies and disks. Hirschfeld had attributed these curvatures to the action of the yellow ligament, and declared that they were destroyed by its section. M. Sappey had repeated the experiment, and found this assertion incorrect—the curvatures persisting.

The other point referred to was the ossification of the ribs. According to M. Sappey, the ribs, like the bones of the cranium and the face, pass through no cartilaginous stage, but a thread of osseous substance is found to be formed directly in the midst of the original "mucous" mass.

THE FUNCTION OF THE VASO-MOTOR NERVES.

Drs. Eulenbers and Landois have published a series of articles upon the function of the vaso-motor nerves, and upon the rôle they seem to play in a certain intermittent ophthalmia. Griesinger considers this affection to be a form of latent intermittent fever, as a neuralgia of the eye more or less severe, accom-

panied by congestion more or less intense. It is nearly always unilateral, and consists in an intense hyperæmia of the eye, with photophobia, suffusion, contraction of the pupil, and often œdema of the iris. When the disease is of long standing, it may terminate in chronic ophthalmia, or in atrophy of the bulb. Griesinger considered the presence of neuralgia essential to characterize this form of ophthalmia, but Mannhardt has reported a case where this symptom was entirely wanting.

A man thirty-six years old was suddenly attacked at nine o'clock in the morning with an acute catarrhal conjunctivitis. Intense redness and swelling of the palpebral and bulbar conjunctiva, abundant flow of tears mixed with mucous flocculi. A collyrium of acetate of lead was ordered. The next morning there was no trace of the affection, but it returned with as much intensity as ever at two o'clock in the afternoon. The same collyrium was employed, and the inflammation again disappeared, to reappear the fifth day between nine and two o'clock. Small doses of quinine were then ordered. An access of moderate intensity occurred the seventh day, but from the ninth the disease did not return.

It may therefore be admitted that the vaso-motor filaments of the trigeminus may be affected independently of the sensitive fibres, and that intermittent ophthalmia may exist uncomplicated by neuralgia.

CURIOUS PHENOMENA PRESENTED BY PRIMITIVE SYPHILITIC INDURATIONS.

In the Archives of Medicine for November, M. Fournier, a distinguished agrégé of the faculty, has called attention to certain curious phenomena occasionally presented by primitive syphilitic indurations. The first and most interesting is an ulceration of the cicatrized chancre. The second is the softening of the central and deep portions of the induration, and its progressive elimination in the form of a purulent detritus. The third phenomenon relates to the production of secondary indurations, resulting from the primitive affection, and occurring in the neighborhood of the initial chancre.

In the first case, the physician may have had to deal with a chancre which has accomplished its different phases with perfect regularity, and has cicatrized in a perfectly satisfactory and apparently definite manner. Under certain circumstances (of which an unusual abundance of the induration seems the most characteristic) this cicatrix is found to open, ulcerate, and erode in various points;—a new wound is thus formed on the surface of the induration, which sometimes excavates its entire extent. M. Fournier has observed this secondary ulceration to be repeated three times on the same base. In the cases in question the rupture of the chancre is entirely spontaneous.

Although in the greater number of cases the ulceration takes place on chancres in which the induration is excessive, it may also occur when this is of only medium intensity. The ulcer is formed from the eighth and fifteenth days after the cicatrization. Sometimes it is quite superficial, a simple erosion; sometimes it affects the excavated form. A sanguinolent rather than purulent liquid is secreted by the wound. The ulcer generally heals with remarkable rapidity, and, although sometimes alarming from its extensive and ragged aspect, it is in reality benign. Even when assuming a phagedenic form, it readily heals with only an application of dry lint.

The conversion of the cicatrized chancre into an abscess, much more rarely occurs than its ulceration. In this case, also, the cicatrix has been regularly formed, and the induration is generally excessive. Presently the centre of the mass is felt to be softened, and a little later a small opening is discovered, through which is eliminated a yellowish sanguinolent liquid, puriform rather than purulent. As many as six openings have been observed, each leading by a curiously formed little passage into a central focus of softening. The integrity of the outer layers of the mass is preserved.

It is evident that the ulcer and the abscess are really analogous lesions, each producing a liquefaction and consecutive elimination of the pathological tissue of the induration. May not the exaggeration of this latter, which has been found so generally to coincide with the lesions, be indirectly their cause, on account of opposing greater difficulty to the ordinary process of absorption?

The secondary indurations may ulcerate, and assume the aspect of primitive hard chancres. M. Fournier thinks that it is on account of cases of this kind that Babington had been led to maintain that syphilitic induration preceded ulceration. An opinion that M. Fournier has no hesitation in pronouncing erroneous, if only on account of the difficulty of diagnosis between initial chancre and herpes.

OPERATION FOR NASO-PHARYNGEAL POLYPUS.

The *Gazette des Hôpitaux* contains an account of an interesting operation practised at the Hotel Dieu of Clermont Ferrand, for a naso-pharyngeal polypus. The patient was a boy of eighteen, extremely diminutive and fragile. The polypus had apparently existed eighteen months. The right cheek was but slightly deformed, but the difficulty of speaking, and the embarrassment of the respiration, forcing the patient to keep the mouth partially open, indicated the existence of a material obstacle to the entrance of air.

The soft palate was pushed forward by a hard, resistant, bright-red tumor, whose lower border projected below the uvula, its adherent edge mounted in the pharynx. The nostril of the same side was obstructed by a fleshy mass, evidently only an expansion of the guttural tumor.

The finger, introduced between the cheek and the alveolar arcade of the upper maxilla, distinguished a small tubercle which corresponded to the exterior tumor. The point of insertion was difficult to determine; nevertheless it seemed probable that the tumor adhered rather to the pharynx than to the nasal fossa.

After some delays, during which the respiration became more and more embarrassed, M. Fleury determined to afford the patient the only chance for life that remained, by practising the resection of a portion of the maxilla, and thus extracting the tumor. The patient being under the influence of chloroform, an oblique incision was made from the commissure of the lips to the external angle of the orbit. Only one artery required ligature. The upper flap was dissected to a considerable distance, then a chain saw introduced by means of a curved needle into the spheno-maxillary cleft, to separate the maxilla from the malar bone. The second lateral incisor tooth was extracted, and the *cisailles*, introduced into the mouth and right nostril, easily divided the palatine vault—a section practised with scissors separated the apophysis of the maxilla; it then was only necessary to apply the blade of the same instrument underneath the orbit and exercise a light pressure, to loosen the bone. The soft parts uniting it to the subjacent tissues were detached with curved scissors, and the bone then easily removed. The nasal fossa and zygomatic cavity were thus laid open, and the opening, though smaller than if the maxilla had been entirely removed, was sufficiently large to give

passage to the tumor, and the risk of deformity was much less than would have been incurred by the other operation. The polypus being discovered, was much larger than had been supposed, since it occupied the cavities of the face. As much as practicable, M. Fleury endeavored to enucleate the tumor. The pedicle was implanted by a large and resistant base in the upper part of the pharynx. It was fortunately but slightly vascular, and the slight hæmorrhage following its division was easily arrested by the cautery. The tumor weighed 112 grains, and was nearly entirely fibrous.

The second day after the operation, inflammation of considerable intensity set up around the wound, and destroyed all hope of union by first intention. The following days a suspicious odor escaped from the mouth and nostrils, which was partially neutralized by lotions of chlorinated soda. The patient was extremely feeble, and a fatal termination was dreaded. However, after some days of uncertainty, the lips of the wound, which had opened, assumed a better appearance and became covered with healthy granulations, the patient was able to rise, to eat, and from that moment the convalescence was assured.

The inflammation was attributed in part to the use of the actual cautery. The wound was dressed with lint steeped in camphorated alcohol.

This is the third case in which M. Fleury has saved a patient from inevitable death, by boldly venturing on this formidable operation on the maxilla.

Among the clinics recommenced with the reopening of the year, that of M. Gosselin, who has succeeded the lamented Velpeau at La Charité, is not the least interesting. The inaugural lesson was divided into three parts. In the first the new professor paid a just tribute to the memory of his predecessor. In the second, he traced a rapid sketch of the history of this famous hospital, founded by Marie de' Medici 260 years ago. During 150 years there was no clinic, and the names of no surgeons have come down to us. The first illustrious clinician of the Charité was Desault, who instituted the *concours* for the position of assistant surgeon. Deschamps was the first who obtained this title, and also the first who availed himself in his scientific writings of observations taken among his hospital patients. Until then, observations had always been collected from the writer's private clientèle. Of all the writings of Deschamps, the best known are his "Observations on the Ligature of the Principal Arteries of the Extremities, on Account of Wounds or Aneurisms." Boyer succeeded Deschamps, and Roux followed Boyer; finally Velpeau took the place of Roux, when the latter succeeded to Dupuytren at Hotel Dieu.

The third part of the lesson was devoted to two patients in the wards, one with a fracture of the wrist, the other with an encysted encephaloid tumor at the internal and lower part of the thigh. Space does not permit me to quote at length M. Gosselin's remarks, further than that, in the latter case, he considered that amputation would not prevent a return of the tumor, but would prolong life. P. C. M.

CHLORODYNE.

To the Editor of the Medical Record.

Sir—In the late edition of Dr. Aitken's Practice of Medicine (1866), Chlorodyne is several times recommended as a valuable remedy, and a formula is given on p. 471, vol. i, which is said to be "a very useful one."

It is strange that a compound of this description should have obtained the sanction of physicians in the absence of any authentic or officinal directions for its preparation. In prescribing it, unless the nostrum is specified, the practitioner may not know which of many compounds will be furnished. I have before me five different formulas for Chlorodyne, all differing in respect to ingredients and their proportions; and not one of them would furnish a good imitation of the English nostrum.

If a chloroform-anodyne is deemed worthy of the place it now holds in public estimation, it should have a uniform composition, or be made officinal, in order to prevent the hazard and uncertainty which must now be incident to its administration. The following is Dr. Aitken's formula:

℞. Chloroform f. ʒ iv; Æth. Sulph. f. ʒ ii; Theraicæ (Treacle) f. ʒ i; Mucilag. Acaciæ f. ʒ ii; Morph. Muriat. gr. viii; Acid. Hydrocyanic. dil. (2 per cent.) ʒ ii; Ol. Menth. Pip. M. iv ad vi. *Misce bene.*

Further directions are given about combining the materials, which we have attempted to follow, but, on standing, the whole of the ether and chloroform separate from the "constituent," so that the formula cannot be considered an eligible one.

About two years ago the writer obtained a sample of Dr. Browne's genuine chlorodyne for examination. It was of a dark color, with an oder of chloroform and ether. By repeated and careful tests we failed to discover in it either cannabis or hydrocyanic acid. (The same result was obtained by Mr. Chas. Bullock in his examination of a similar article.) The "constituent" was found to be molasses, gum acacia, and ext. glycyrrhiza. It contained no peppermint. There might possibly have been a small quantity of capsicum, but the pungent effects of this and chloroform are so similar that its presence may be considered doubtful. An imitation, containing only chloroform, morphia, and ether, resembles "the genuine" in sensible properties and operative effects. I published, accordingly, the following formula for Chlorodyne, and should not have thought it of sufficient consequence to refer to it again, but for the notice taken of the compound in so respectable a work as Aitken's Practice of Medicine. The following is an imitation of Dr. J. Collis Browne's Chlorodyne.

Heat molasses in a water-bath, and remove the scum until it becomes clear. Mix one part of officinal mucilage of acacia with two parts of the molasses, to form the constituent.

Dissolve eight gr. sulphate of morphia in one drachm and a half of water, by heat, and add eight gr. powdered extract of liquorice. To this solution add one fluid drachm of conc. sulphuric ether. Add a portion of the constituent, and two fluid drachms of chloroform, and shake the mixture then add enough of the constituent to make one fluid ounce.

Ten minims, or twenty drops, contain ⅛ gr. of the morphia salt, two minims and a half or ten drops of chloroform, and half the quantity of ether

Chlorodyne thus prepared resembles the nostrum in pungency, color, density, and other properties. If the prescriber wishes to administer cannabis or hydrocyanic acid, they may be added extemporaneously.

Truly yours,

W. W. Ely, M.D.

Rochester, N. Y., December, 1867.

Loss of Memory from Syphilis.—Dr. Cerasi (*Medical Journal*, Rome, Italy), in a case of flagging intellect and loss of memory from syphilis, obtained a complete cure in two months and a half by the use of mercurial friction and iodide of potassium.

UTERINE SURGERY.

To the Editor of the Medical Record.

Sir—There is much truth and some error in the assaults now being frequently made upon the practice and teachings of modern uterine surgery. In our efforts to avoid one extreme, let us be careful that we do not fall into the other, and especially let us be careful not to be led astray by the influence of fashion in medicine. There can be no doubt that in the various operations for healing breaches of continuity in the genital organs of females, great good has been accomplished; but it is remarkable that what have within a few years been proclaimed as very valuable inventions and discoveries, should so soon have gone out of use. The clamp suture is one instance of this; and after all the later improvements, it may now well be doubted whether any that have been employed are to be preferred to that of the waxed silk, so long in use in surgical operations. Vesico-vaginal fistules were long ago cured by the use of this suture, the wound being protected from mucous secretions by the daily application of nitrate of silver and dry calomel. Cauterizations of the os and cervix, the propriety of which was long unquestioned, are now deemed worse than useless by many physicians, who have experimented with them to their hearts' content; and there are few men of experience who approve of slitting up the neck of the womb, or amputating the os, for any of the purposes recommended. The pessary has fallen into discredit, not only by its multiplied failures, but by reason of the vast variety of its forms; and some are now reverting to the ancient notion, that prolapsus is best cured by relieving the organ of its engorgements. The verdict of the profession must soon accord with that of women who have worn pessaries—hard substances cannot be worn in the vagina without inflicting injury. The use of the speculum as a means of diagnosis may sometimes be proper; but in the large majority of cases a digital examination is more satisfactory, and the speculum will be resorted to very rarely except by tyros in medicine.

Yours truly, M.

Medical Items and News.

PERSONAL.

Surgeon J. D. Miller, U.S.N., has been detached from duty as fleet surgeon of the North Atlantic squadron and placed on waiting orders.

Assistant Surgeon James N. Hyde, U.S.N., has been ordered to the Naval Hospital, Washington, *vice* Acting Passed Assistant Surgeon D. C. Burleigh detached, and ordered to the Purveyor.

Acting Assistant Surgeon Edward T. T. Marsh has been placed on waiting orders.

Dr. James Crane, of Brooklyn, has been elected President of the Health Board, *vice* Schultz, resigned.

Dr. Austin, formerly editor of the Madras *Athenæum*, and a writer in the *Saturday Review*, has been appointed special correspondent of the *Times* for the Abyssinian Expedition.

Dr. Albert Perchment, a distinguished physician of Pittsburgh, died of heart disease, Dec. 13.

Death of Surgeon Lewis Taylor.—Intelligence has been received at the Surgeon General's office of the death of Surgeon Lewis Taylor, United States Army, at Fort Wadsworth, Dakota Territory, on the 5th of January.

Medical Society, County of New York.—At the next stated meeting of the Medical Society of the County of New York (February 3d) Dr. Fordyce Barker will read a paper on "Abortion;" and Dr. O. G. Smith, on the "Paralysis of the Insane." Several members have promised to present their views on these subjects, and an interesting discussion may be expected.

Northern Dispensary.—The 41st annual meeting of the Trustees of the Northern Dispensary was held in the Board-room of that Institution, corner of Waverley Place and Christopher street, Hon. Charles T. Kirkland in the chair. The secretary's and treasurer's reports were received and adopted. These documents show that the receipts from all sources during the past year, including balance from 1866, amounted to $6,999.41, and the expenditures to $6,870.49. The total number of persons treated by the institution during the year was 21,299, of whom 12,498 were females and 8,801 males. 20,923 of these were either cured or relieved, and the balance were sent to hospital, discharged, or died. There remained under treatment, Dec. 31st, 1867, 33. A Board of Trustees for the ensuing year were then elected, and a vote of thanks offered to the chairman, and the meeting adjourned.

Bellevue Hospital.—The following are the statistics of this institution for the year just ended:—Admissions, 5,805; patients in hospital on the 1st of January, 1867, 790; total number treated during the year, 6,595; discharged from hospital, 5,264; deaths, 640; in hospital on the 1st of January, 1868, 691. The ailments of the patients were as follows:—Accidents and injuries, 1,507; obstetric cases, 626; infants born, 561; cholera, 5; all other cases, 3,106. The deaths were from the following causes:—Injuries and accidents, 147; cholera, 5; puerperal fever, 9; infants born dead, 77; Bright's disease, 113; pulmonary consumption, 146; all other causes, 143. The majority of the patients were of foreign birth; only 1,799 native-born citizens having been brought to the hospital for treatment.

Cholera at Quarantine.—The Hamburg ship Leibnitz arrived at Quarantine, Jan. 11 ult., with thirty-five cases of cholera on board, one hundred and five deaths having occurred during the voyage from the same disease.

Military Hospitals for the Abyssinian Expedition.—"Immense military hospitals," according to the *Nord* of Brussels, "are being organized at Alexandria, Cairo, and Suez; that of Suez already contains two thousand beds."

American Journal of Obstetrics and Diseases of Women and Children is to be the title of a quarterly journal shortly to be issued under the supervision of Drs. Noeggerath and Dawson, of this city. The subscription price is named at $3.00 per annum.

Average Duration of Life in Italy.—The director of the Italian Life Assurance Society, M. W. Rey, has published some interesting statistics showing the average duration of life in Italy as compared with that in other countries, from which it appears that the mortality of Italians is exceptionally great. He shows that in Italy, 22½ per cent. of the infant population die yearly, and that, even in the healthiest districts, the average duration of life is 33.43 years only, while in France it is 38.33, at Geneva, 42.02, and in England, 39.31. The number of births, too, is relatively much smaller in Italy than in England and France.

Dr. B. S. Reilley, Acting Assistant Surgeon, U. S. A., died of yellow fever at Rio Grande City, Texas, Sept. 20, 1867.

LAMENTABLE DEATH FROM CHLOROFORM.—A young lady, the wife of a lieutenant-colonel in the Confederate army, died recently at Gallatin under very painful circumstances. Being near confinement, and suffering during the night with great pain, she inhaled some chloroform on her own account. She laid the handkerchief upon her chin and fell asleep. In the morning she was found dead. This circumstance goes to prove how dangerous a plaything chloroform is.

THE KANSAS COLLEGE OF PHARMACY is the name of an association of enterprising and respectable pharmaceutists of Kansas.

MICROSCOPIC LENSES.—The improvement in lenses for the microscope began in reality with the $\frac{1}{25}$ of Powell & Leland. This glass gave an available power of from twelve to eighteen hundred diameters. The $\frac{1}{50}$ achromatic lens, with a focal distance of $\frac{1}{135}$ of an inch, of the same makers, followed. At present, there are only two of these objectives in the United States—one at the Army Medical Museum, the other the property of Dr. H. W. Atkinson, of New York City.

Much, however, is expected from a $\frac{1}{75}$ made by W. Wales, of Fort Lee, N. J., which an exchange describes as being possessed of a good definition, a flat field, and as giving two thousand diameters with ordinary light. Its focal distance is $\frac{1}{75}$ of an inch. Another peculiarity of this lens is that it can be used not only as an ordinary achromatic lens, but also as an immersion-lens; and as an "immersion" it has an extra large angle of aperture.

NUMBER OF EMIGRANTS WHO HAVE ARRIVED IN NEW YORK DURING PAST YEAR.—Two hundred and thirty-three thousand four hundred and eighteen.

BLOOD-CORPUSCLES IN CHLOROSIS.—M. Duncan, of St. Petersburgh, has just pointed out the remarkable fact that the blood-discs of chlorotic persons yield up their coloring matter more easily than do those of healthy subjects.

HEALTH BOARD STATISTICS.—The second annual report of the Metropolitan Board of Health, which has just been published, shows that during the year ending September, 1867, the number of marriages celebrated in New York City was 15,026, and in Brooklyn 1,349, and the number of births registered in New York City was 12,569, and in Brooklyn 4,878. The deaths in New York City 23,433, and in Brooklyn 8,589.

JURARE IN VERBA MAGISTRI.—There are many in this country who are wont to swear by the words of foreign masters; who, to the sound advances of home growth, yield grudgingly a half-doubting assent until they have been approved abroad; who, to the utterances of native authors, though abundantly sustained by facts, grant but a tithe of the weight they would concede to them if imported from Paris or London. We know perfectly well that the immense hospitals and extensive libraries of Europe have given our transatlantic teachers the start of us in observation, erudition, and scholasticism, and that we owe them a debt we have but just begun to repay. But we need not, on that account, forget that, for practical tact, for the power of seizing the essential truth while sifting out the unimportant, and for the shrewd interpretation of facts, the American mind is preëminent. Let us learn to appreciate and develop our originality. By the side of the literary excellence of the Philadelphia, and of the enterprise of the New York School of Medicine, we may call to mind that the wise practical counsels of James Jackson; the self-limitation in disease of Bigelow; the teachings of Ware, as, for instance, upon the different kinds of so-called croup, and the treatment of the membranous form without perturbation, and also upon the injurious effects of opium in delirium tremens; the pathological learning of John B. S. Jackson; the bold, yet careful and successful surgery of our hospitals, associated with names too prominent to need mention, recording, among other things, a method of curing vesico-vaginal fistula, quietly practised in private wards, which anticipated what has been done elsewhere; the discovery of etherization, caught up and promulgated with prompt sagacity; the brilliant and authoritative physiology of Dalton, transplanted from Boston; the treatment of syphilitic iritis without mercury, by Williams; the judicious recognition of the sway of Nature in disease, not preceded, we believe, by Forbes in his famous articles in the "British and Foreign;" all these, and much more which might be mentioned, are as valuable as though they emanated from foreign sources.

The war has emancipated public opinion and literature from subserviency to the Old World. But American physic has yet to declare its majority. We shall, of course, continue to examine what Europe has to offer us, but should see it through our own spectacles.—*Boston Medical and Surgical Journal.*

REPORT OF COMMISSIONERS OF CHARITIES AND CORRECTION.—The Commissioners of Charities and Public Correction, New York, report 90,815 persons in the Institutions during 1867. Of these, 47,646 were in the City prisons; 2,311 in the Penitentiary; 16,135 in the Workhouse; 4,033 in Almshouses; 90 in the Blind Asylum; 204 in the Hospital for Incurables; 1,535 in the Infant Hospital; 6,573 in Bellevue Hospital; 6,855 in Charity Hospital; 209 in the Small-pox Hospital; 320 in the Fever Hospital; 1,441 in the Lunatic Asylum; 153 in the Epileptic Hospital; 119 in the Paralytic Hospital; 2,040 in the Randall's Island Nurseries; 1,080 in the Randall's Island Hospitals, and 62 in the Idiot Asylum.

ESTIMATED EXPENDITURES FOR THE SUPPORT OF CHARITIES, ETC., IN THIS CITY.—Among the estimated items of expenditure for the maintenance of the government of this county for 1868, are the following: Metropolitan Board of Health Fund, $137,088; Coroners' Fees, $26,500; Asylum for Idiots, $660; Children's Aid Society, $50,000; Deaf and Dumb Asylum, $10,348; Institution for Blind, $2,760; New York Juvenile Asylum, $95,000; New York State Lunatic Asylum, $3,029; Nursery and Child's Hospital, $7,000.

ABANDONED INFANTS.—One thousand seven hundred and twenty-three infants, who had been thrown away by their parents, were picked up in the streets of this city last year, of which number 749 now fill the children's nurseries on Randall's Island.

PHTHISIS IN PERU.—On the sea-coast of Peru, as on that of the Gulf of Mexico, incipient tubercular phthisis is one of the commonest of pulmonary affections. From time immemorial, however, it has been known to the natives that a removal of phthisical patients, even in the stage of well-marked ulceration and cavities in the lungs, to the inland valley of Jauja, at a height of 10,000 feet above the sea, was followed by an almost invariable suspension of the disease—a fact which is quite corroborated by the practice of physicians at the present time. From the statistics of Dr. Fuentes, of Lima, published in 1858, it appears that nearly 80 per cent. of the cases of phthisis sent to the Jauja valley are cured. So forcibly has this fact been brought before the Peruvian Government, that it has established in this valley a military hospital for consumptive patients, and especially for native Indian soldiers, who, in the capital, are singularly prone to phthisis. Indeed, of the

whole annual mortality of Lima, no less than twenty-two and twenty-nine thirty-ninths per cent. are attributed by Dr. Fuentes to this disease. So that, as Dr. Smith remarks, we must admit that the Peruvian physicians have abundant opportunity of testing the various modes of treating it; and the unanimous opinion at which they have arrived as to its curability by a removal of the patient to the Jauja valley, leaves no doubt as to the well-founded nature of the reputation which that district enjoys. How much of this curative power may be due to the moral influence exerted by its scenery and associations, it would be difficult to say; but a nearer approach to Elysian felicity than the lives which its population are described as leading, it would be probably impossible to find in any less favored land. The harvest being home, we are told, the whole rural population rest from their agricultural labors for eight months in the year, which they give up entirely to amusements and feasting, trusting to the rain of heaven during the other four months of the year to fertilize their land and yield them more food than they require. Surely Dr. Johnson must have had this valley in his eye when he wrote his pleasing fiction of "Rasselas," for no other of which we have ever heard realizes the physical conditions under which the Prince of Abyssinia sought for the perfection of human happiness. And we may mention for the benefit of such of our readers who, as valetudinarians or philosophers, may feel an interest in knowing more about this charming region than we are able to tell them, that if the project of running regular steamers up the Amazon from Pará, 2,500 miles from its mouth, which has just been started by an American company, becomes an established fact, they will be able to transport themselves into it, almost without changing vessels, after a voyage which, though long, is not tedious nor debilitating, and which will carry them through some of the most magnificent scenery that the world can produce. —*British and Foreign Medico-Chirurgical Review.*

The New Grass which has made its appearance in the Southern States since the war, is called *Lespidosa striata*, and is said to be a native of China and Japan. It appears to be a dwarf clover, very thick set, much relished by cattle, and is a complete exterminator of Bermuda, joint, sedge, and other grasses. It was not seen before the war, and how it was introduced is a mystery among planters and botanists.—*Scien. Amer.*

Statistics of the British Army.—A correspondent of the London *Times* writes:—"Dr. Bryden's valuable tables, showing the health of the Bengal Army, English and native, and of the prisons, during 1866, have been shown to me. The death-rate of the English army was only 20.11 per 1000, while it was 32½ in the three years ending 1862, 23½ in 1863, 21 in 1864, and 24¼ in 1865. There has been a similar improvement in the rate among the women and children. In 1865 it was 42 per thousand women and 83.15 per thousand children. Last year it fell to 25½ and 76.11 respectively. The new barracks are being raised all over the country."

Mortality among Physicians at Galveston, Texas. —Not less than eight practising physicians have died of yellow fever in Houston, Texas, during the prevalence of the epidemic.

To Prevent Metals from Rusting.—Dip the article into very dilute nitric acid, and afterwards immerse it in linseed oil, allowing the superfluous portions to drain off. When the coating of oil is thoroughly dry, the article will be ready for use, and thus protected, will remain bright for years.

Discourses over the Tomb of Velpeau were pronounced in the name of the Institute by Nelaton, in the name of the Academy of Medicine by Gosselin, in the name of the Faculty by Richet, in the name of the Administration of Public Secours by Husson, in the name of the Society of Surgery by Guyson, and in the name of the friends of the deceased by Longet. Velpeau was attended most faithfully in his last illness by Nelaton and Barth.—*Gazette Hebdom.*

Proceedings against a Surgeon.—A member of the faculty, who assisted at a notorious and fatal duel which took place at Lisbon some months ago, was proceeded against, along with the other accomplices, for having attended in a case which resulted in the loss of a life. The accused, who was a military surgeon, proved that he was compelled to do the service by order of the commandant of his regiment, and that he was not there of his own free will. He was discharged. It appears to us that military discipline and the consciences of medical officers should be in accord.

Lunatic Asylums in Australia.—Two new lunatic asylums are about being established in Australia.

New Publications.

Books and Pamphlets Received.

Treatise on the Diseases of the Eye, including the Anatomy of the Organ. By Carl Stellwag von Carion, M.D., Professor of Ophthalmology in the Imperial Royal University of Vienna. Translated from the Third German Edition, and Edited by Charles E. Hackley, M.D., Surgeon to the New York Eye and Ear Infirmary, Physician to the New York Hospital, Fellow of the New York Academy of Medicine, etc.; and D. B. St. John Roosa, M.D., Clinical Professor of the Diseases of the Eye and Ear in the Medical Department of the University of the City of New York, etc. With an Appendix by the Editors. Illustrated by Ninety-six Wood Engravings and Eighteen Chromo-Lithographs. New York: William Wood & Co. 1868.

The Physician's Daily Pocket Record. Comprising Visiting List, Diary, etc., etc. By S. W. Butler, M.D. Philadelphia: Office of Medical and Surgical Reporter, 115 South Seventh Street. 1868.

Annual Abstract of Therapeutics, Materia Medica, Pharmacy, and Toxicology for 1867, followed by an Original Memoir on Gout, Gravel, and Urinary Calculi. By A. Bouchardat, Professor of Hygiene to the Faculty of Medicine, Paris, etc. Translated and edited by M. J. De Rossett, M.D., Adjunct to the Professor of Chemistry, University of Maryland, etc. Philadelphia: Lindsay & Blakiston. 1868.

The Treatment of Diseases of the Throat and Lungs by Inhalations, etc. By Emil Siegle, M.D. Translated from the Second German Edition by S. Nickles, M.D. Cinn.: R. W. Carroll & Co. 1868.

Pathological Anatomy of the Female Sexual Organs, by Julius M. Klob, M.D., Professor at the University of Vienna. Translated from the German by Joseph Kammerer, M.D., Physician to the German Hospital and Dispensary, New York; and B. F. Dawson, M.D., Assistant to the Chair of Obstetrics in the College of Physicians and Surgeons, New York. New York: Moorhead, Simpson & Bond. 1868.

Tenement Houses, their ground area, cubic feet of air space, and ventilation. By Wm. F. Thoms, Surgeon to the Eastern Dispensary, etc. (Reprint.) Albany: 1867.

Erratum.—Page 492, line 22 from bottom, for "1 grain equals 18 grammes," read, "1 gramme = 15,444 grains, troy."

Medical Society of the State of New York.

SIXTY-FIRST ANNIVERSARY.

First Day—morning session.

The Society met, pursuant to statute, in the State Geological Rooms, Albany, at 11 A.M. on Tuesday, February 4, 1868.

The President, Dr. John P. Gray, of Utica, called the meeting to order, when there being no clergyman present, the Society, on motion of Dr. March, proceeded to regular business.

ADDRESS OF THE PRESIDENT.

Dr. Gray next read his inaugural address, and in compliance with the by-law on the subject, gave a sketch of the progress of medicine during the past year. He alluded to the fact that two new medical journals had been started in the city during the time referred to, the *Medical Gazette* and the *Quarterly Journal of Psychology*, and in passing urged the members to sustain all the various medical periodicals by earnest support, both literary and pecuniary. In alluding to the subject of medical education, he deplored the low grade of requirements, and the non-existence of any law which would compel the student to study any specified time. He suggested the propriety of recommending to the legislature, not only the passage of an act naming some particular time for study, but also that the period should be four full years. The question of regulating the proper sale of drugs also came up for consideration, and some legislation was believed to be necessary to accomplish the desired object. Another point made by the speaker in his elaborate, well-timed, and able address, was the necessity of clearing away the stumbling-block to prosecutions for abortions, in the proper understanding of the term "quickening," it being desirable to make all fully amenable to the law who should destroy a fœtus that was viable.

Dr. Bissell, of Utica, offered the following, which was adopted:—

Resolved, That the President's inaugural address be referred to a committee of three, to examine and report such action thereon as may be deemed necessary on the part of the Society.

The following committees were next appointed:—

Business Committee.—Dr. E. R. Squibb, of Brooklyn; Dr. S. O. Vanderpoel, of Albany; and J. Foster Jenkins, of Yonkers.

Committee on Credentials.—Drs. Hyde, P. P. Staats, and W. H. Bailey.

Committee on Reception.—Drs. Alden March, Doolittle, and W. B. Bibbins.

Committee on President's Address.—Drs. Brinsmade, Banks, and Rochester.

The Rev. John F. Peck, at this stage of the proceedings, apologized to the Society for his absence at the time of the opening of the session, having been detained some distance from the place of meeting by the sickness of some of his parishioners.

Dr. James H. Armsby offered the following, which was carried:—

Resolved, That a committee of three be appointed to invite the physicians who are members of the Constitutional Convention and the State Legislature to participate in our deliberations during our meeting.

After which Drs. Armsby, Hall, and O. White, were appointed as said committee.

DEATH OF DRS. JOHN M'CALL AND NICHOL H. DERING.

Dr. Bissell said:—Mr. President, it is my painful duty to announce to this Society the death of two of its most worthy members since our last annual meeting, Dr. John McCall and Dr. Nichol H. Dering, both of the city of Utica.

Dr. McCall entered the medical profession in 1812 as an assistant-surgeon in the United States army, at the commencement of the war between the United States and Great Britain. Before the close of that war he was appointed a regimental surgeon, and served his country in that capacity until peace was restored in 1815, with honor to himself and the best good to the army. After an honorable discharge from the service, he commenced the practice of medicine in the county of Oneida, where he soon earned for himself an honorable standing in the profession and a lucrative practice, which he retained until stricken down by the palsy, resulting in his death. On the field of his protracted labors of more than fifty years, he was permitted to lay down his life surrounded by two generations of weeping friends. Dr. McCall, after having served for four years as a delegate from the Oneida County Medical Society, was elected a permanent member of the New York State Medical Society in 1838, just thirty years ago; therefore at the time of his death he was one of the oldest members of this body. Of those living who were present when he became a permanent member of this organization, there now remain but Elijah F. Foote, of New Haven, elected in 1827; Dr. Platt Williams, of Alder Creek, Oneida Co., elected in 1828; Dr. Edward G. Suddon, of New York, in 1831; Dr. James McNaughton, of Albany, in the same year; Dr. Joel Foster, of New York, in 1832; Dr. John P. Morgan, of St. Louis, Missouri, in 1833.

After some feeling remarks concerning the death of Dr. Dering, he offered the following preamble and resolutions, which were adopted:—

Whereas, This Society has heard with profound regret the announcement of the death of two of its most honored members since its last annual session, viz., Dr. John McCall, and Dr. Nicol Dering, both of the city of Utica; therefore,

Resolved, That in the death of our distinguished brother, Dr. John McCall, who for thirty years, as a permanent member of this Society, faithfully labored for its advancement and prosperity, and for the medical profession of our State, and who has filled with honor the highest office in the gift of the profession, we who survive him are called upon to mourn the loss of one who was ever faithful and devoted to the cause of medical science, and the improvement of the medical art, a true physician, a kind and generous friend, and a wise and judicious counsellor in all that pertained to the science and practice of medicine.

Resolved, That in the death of our deceased brother, Dr. Nichol H. Dering, of Utica, who for sixteen years was active and devoted as a permanent member of the New York State Medical Society, we are especially called on to lament the loss of one of our most cherished associates and brother members, whose long life had been devoted to the promotion of the healing art, and who had endeared himself, not only to his medical brethren, but to all who enjoyed his friendship; and in an especial manner to the poor, who at all times found him both willing and ready to minister to their wants.

Resolved, That Dr. Chas. B. Coventry, of Utica, be requested to prepare a memoir of the late Dr. John McCall, and furnish it for publication in the next volume of the Transactions of this Society.

Resolved, That Dr. M. M. Bragg, of Utica, be requested to prepare a memoir of the late Dr. Nichol H. Dering, for publication in the next volume of our Transactions.

Resolved, That the secretary furnish copies of the foregoing resolutions to the respective families of the deceased.

Prof. White, of Buffalo, made some appropriate remarks in regard to the deceased members.

APPEAL TO THE SOCIETY BY AN EXPELLED MEMBER FROM A COUNTY SOCIETY.

DR. SQUIBB, as Chairman of the Business Committee, presented an appeal from Dr. N. K. Freeman, of West Farms, Westchester Co., from a decision of expulsion from the County Society, at the same time suggesting that it would be desirable and proper to refer the matter to a Committee of Censors, who should report their decision to the Society for ultimate action.

The propriety of this measure was discussed, and culminated in the passage of the following resolution, offered by Dr. Bissell—

Resolved, That a standing committee on medical ethics, to consist of three members, be annually appointed, to whom all papers, resolutions, and other matters presented to the Society for consideration, involving questions of medical ethics, shall be referred.

Drs. Brinsmade, Hyde, and Banks, were appointed on the aforesaid committee.

DR. HUN, Chairman of the Committee on the Revision of the By-Laws, read an elaborate report, which was finally referred back, with instructions to report a complete set of by-laws at the next meeting, and have a sufficient number of the same printed for distribution at the commencement of the next annual session.

A communication was next read, inviting the members to an entertainment to be given by Drs. March and Armsby, at the City Hospital, on Wednesday evening, at 9 o'clock.

Reports were next received from the following delegates to sister societies: from Dr. H. C. Gray, as delegate to the New Hampshire State Medical Society; and from Dr. Govan, as delegate to the New Jersey State Medical Society; after which the Society adjourned, to meet at 3 P.M.

FIRST DAY—AFTERNOON SESSION.

THE Society met, pursuant to adjournment, at 3 P.M., and was called to order by the President. At the suggestion of Dr. Squibb of the Business Committee, the minutes of the meeting were to be read every morning.

The President announced the following Nominating Committee: Dr. Jos. C. Hutchison, Dr. Geo. J. Fisher, Dr. Thos. Hun, Dr. F. Burdick, Dr. D. P. Bissell, Dr. W. C. Wey, Dr. W. Manlius Smith, and Dr. C. C. Wyckoff.

The following communication was received:

STATE OF NEW YORK, IN ASSEMBLY,
ALBANY, Feb. 4, 1868.

On motion of Mr. Jacobs:

Resolved, That the Special Orders for Tuesday and Wednesday evenings of this week be set aside, that no sessions be held on those evenings; and that on Wednesday evening, the use of the Assembly Chamber be allowed to the State Medical Society.

By Order, C. W. ARMSTRONG, Clerk.

DR SQUIBB, from Business Committee, announced the reception of a report of Dr. Langworthy, Health Officer of Rochester. The secretary was directed to ask Dr. Langworthy to make an abstract for the Transactions.

LEGAL ENACTMENTS TO REGULATE PRACTICE OF DENTISTRY.

On motion, DR. WESCOTT, dentist, from Syracuse, was solicited to read a report concerning the efforts being made to obtain legislation upon the practice of dentistry. The report was received, and the following preamble and resolution, offered by Dr. Squibb, was adopted:

Whereas, The Dental profession of the State of New York (now numbering about two thousand practitioners), are about to petition the Legislature of the State for such legal enactments as will tend to regulate the practice of dental surgery, and to mark some distinction between the meritorious and skilful, and the ignorant pretender; and to give this profession a legal recognition, it is by this, the *State Medical Society*,

Resolved, That this movement on the part of the Dental profession of this State, to procure such general laws for their protection as now pertain to the Medical profession, meets with our hearty approval, and that we hereby join in the prayer of these petitioners for this purpose.

THE SULPHITE OF SODA AND GLYCERINE.

DR. JOHN H. GRISCOM, of N. Y., read a paper entitled "Therapeutic Value of Certain Articles of the Materia Medica of Recent Introduction," in which he treated more particularly of the uses of sulphite of soda as an internal, and glycerine as an external remedy. The former, by its peculiar antiseptic property, was considered by him as one of the most valuable alteratives, especially in those cases of functional dyspepsia, where it was necessary not only to arrest the fermentative process, but also to furnish an alkali. The latter substance, in consequence of its affinity for the watery elements of the blood, had, according to his observations, a marked effect in melting down all inflammatory indurations.

The paper was, on motion, referred to the Publication Committee, not however without some humorous allusions by Dr. Corliss to hobbyism in new remedies generally.

DR. MARSH introduced Prof. Barker, of New Haven, formerly of Albany. Prof. Barker gracefully responded to the introduction. Also Chas. L. Ives, of New Haven, who also addressed the Society; as did also Drs. Foster, of Portland, Maine, and Lewis A. Pendleton, of Maine.

DR. SQUIBB read by title the following papers: "Method in Medicine," presented by the Albany Co. Med. Society, by Dr. Pomfret; continuation of paper on "Monstrosity," by G. J. Fisher, of Sing Sing; all of which were referred to the Publishing Committee.

CONCERNING MONSTROSITIES AND THE N. Y. LEGISLATURE.

DR. CORLISS, at this stage of the proceedings, remarked that the subject of "Monstrosities," although interesting in its way, was hardly of such a character as to warrant its continuous publication. He was of the opinion that by incurring the expenses of the necessary woodcuts, the Society might run the risk of not having the legislature issue any volume the ensuing year.

DR. STAATS favored the same view.

DR. HUMPHREY, of the Assembly, by invitation, remarked upon the necessity of retrenching the expenses of that body by cutting down everything in the shape of papers, in the Transactions, to the smallest possible compass. He acknowledged that he loved science and progress, and endeavored to say many pretty things concerning the good that the State Society was doing, but he thought that the extra expense of a few woodcuts was too much for the impoverished legislature of New York to stand.

DR. BISSELL was inclined to differ with the honorable gentleman as to the pecuniary capability of the legislature, and thought that the Transactions of the State Society were fully as valuable as any of the large number of other documents upon which money was so lavishly spent.

DR. FISHER, the author of the essay, remarked that he had taken great pains to carry on the work properly, and in order to follow out his original design, he had gone to no little expense of time and money. Although the papers were very near completion he did not object to stopping where he was; in fact, he felt that after what had been said, it would be common

courtesy on the part of the body to invite him to proceed, if they did not choose to endorse the remarks of the members who preceded him. He also alluded to the several points which he intended to bring out, and their importance in a practical point of view.

The whole subject was decided to be out of order, and consequently no definite action upon it was taken at this time.

The Business Committee presented the following papers by title: "The Habitual Use of Alcoholic Liquors on the Public Health," by W. F. Thoms; "Effects of the Meteorological Influences on Health," by W. F. Thoms; "The Chemistry, Physiology, and Pathology of the Phosphates," by Gerardus H. Wynkoop; "Diagnosis and Treatment of Diseases of the Ear," by D. B. St. John Roosa; "Abortion," by Dr. Fordyce Barker, and "Illustrations of the Report of a Case of Removal of the Entire Scapula for Osteo Sarcoma," by Stephen Rogers. They were all referred to the Publishing Committee.

Dr. Newman read his report on "Consanguineous Marriages," and asked to have the committee continued. Report received and committee continued.

The Society then adjourned till 8 P.M.

First Day—evening session.

The Society met at 8 P.M., and was called to order by the President.

Dr. Squibb presented the "Biographical Sketch of Alden S. Sprague, M.D.," by C. C. Wyckoff; "A Report from the Madison Co. Med. Society, upon some of the Diseases of that County," by Dr. Saunders. All of which were referred to the Publishing Committee.

Dr. Garrish read his report on "Tsan-Tsi or Rhynchosa Excavata in Amenorrhœa." Referred to Publishing Committee.

Dr. Wolff moved to lay the whole subject on the table. Lost.

Dr. Garrish next presented a specimen of an acephalous monster.

Dr. Bates, from Columbia Co., made a report as delegate to the Mass. Med. Society; after which the Society adjourned until Wednesday, 9½ A.M.

Second Day—morning session.

The meeting was called to order by the President, Dr. Gray, when the Rev. Mr. Smart, of Albany, offered a prayer. The minutes of the meetings of the previous day were read and approved.

Dr. Coventry, of Utica, presented a memoir of the late Dr. John McCall, which was referred to the committee on publication.

THE USES OF THE SPHYGMOGRAPH.

Dr. S. O. Vanderpoel, of Albany, exhibited, by request, the workings of the sphygmograph. He stated that Dr. Hun, of Albany, was the first gentleman who had brought the instrument to this country, and that with him he had tested its extended applicability in a large number of cases. After stating that the instrument was destined to do for cardiac disease what the stethoscope had done for chest troubles, he described the manner in which the pulse-waves were registered, and the significance of the tracings.

Dr. March introduced Dr. Hitchcock, a delegate from the Massachusetts State Society.

Dr. Allaben, of Delaware Co., read a report of a case of compound fracture of the leg, which had occurred in that county, and for the treatment of which he had been sued in the sum of $500 for malpractice, in causing mortification, as was claimed, by tight bandaging. The facts of the case, as they appeared in the report, were adverse to such a decision. His object in presenting the case to the Society was to obtain some expression of opinion, not only upon this case, but upon similar ones. The report was referred to the Committee on Publication.

On motion of Dr. Lee, of Peekskill, the whole matter was referred to the following committee of three: Drs. Armsby, Hutchison, and Wolcott.

ANASTOMOSING ANEURISM OF THE ORBIT.

Dr. Armsby introduced the Rev. Dr. Hartwell, who, a year before, had been seized with an inflammation of the left eye, terminating in a slight protrusion of the eyeball, which had gradually been increasing until the present. The tumor was strongly pulsating in character, and could be diminished somewhat by pressure upon the carotid of that side. The diagnosis had been that of ophthalmic aneurism. The question as to an operation of ligation of the carotid came up, and would in all probability have been performed, had not an aneurismal varix suddenly made its appearance upon the prominence of the left shoulder. The patient's health was beginning to break down, and the expression of opinion on the part of the members was solicited as to the propriety of any operative interference.

Dr. March gave it as his opinion that the disease was an aneurism by anastomosis, and believed with others present that the case was a hopeless one for surgical benefit.

Dr. Quackenbush read the Treasurer's report, showing a balance of over one hundred dollars to the credit of the Society.

HOLT'S INSTRUMENT IN STRICTURE.

Dr. Hutchison, of Brooklyn, read a paper on the uses of Holt's instrument in the treatment of stricture, and cited some illustrative cases. As this paper will be presented to our readers at some future time, we shall not here make an abstract of it.

Dr. March related a case of cancer of the rectum, for which he had removed two inches of the gut. This case will also probably be published *in extenso* at a future time.

REPORT OF COMMITTEE ON PRESIDENT'S INAUGURAL.

Dr. Brinsmade, as Chairman of the committee on the President's Inaugural, offered the following, which were unanimously adopted:

The Committee to whom so much of the President's address was referred as pertains to legislative action, respectfully report:

First. That in their judgment, laws should be enacted, if possible, to secure proper qualifications and restrictions, on the part of those to whom the preparation, compounding, and sale of drugs and medicines is entrusted.

Second. That criminal abortion is of such frequent occurrence, and is so lightly regarded by the community in general, that its wickedness and enormity, and destructiveness to health, can only be made apparent by the united expression of the medical profession; and that it is the sense of the Medical Society of the State of New York, that the words, "With a quick child," in chap. 22, § 1, quoted in the address, should be stricken out, and the statute thus amended made to cover the whole period of gestation.

Third. That the remarks on the preliminary education of students, and on their proper medico-collegiate course, are most fully and thoroughly endorsed, and that all legitimate action to secure the same is most earnestly commended.

Fourth. Without further specification, the committee advise the publication and wide dissemination of the address, as presenting the sentiments of the Society and of the profession at large; and *Lastly*, They recommend the appointment of a local committee to present, if practicable, the necessary documents to the present Legislature of the State of New York, to procure such legal enactments as shall accomplish the end desired—and if that cannot be done, to present the same to the next Legislature at the commencement of its session.

THO. C. BRINSMADE,
JAMES F. BANKS,
THOS. F. ROCHESTER.

DR. CORLISS offered his report, as delegate to the Rhode Island and Vermont Medical Societies.

The following committee on the above resolutions of Dr. Brinsmade, as chairman of the Committee on President's Inaugural, was announced: Drs. Brinsmade, Banks, and Rochester.

MICROSCOPICAL EXAMINATION OF DAMAGED AND VALUABLE PAPERS.

DR. E. H. PARKER, of Poughkeepsie, remarked on the use of the microscope in detecting alterations in valuable papers. The remarks were based upon two very interesting cases of forgery, to which the doctor had been called as an expert.

The first was one in which it was an alleged promissory note, signed by a blind man who had deceased. The gentleman in question had become blind by cataract, but was nevertheless in the habit of signing all important papers. The body of this note was written by a different hand, in blue ink, and the name in black ink. The question came up as to whether the body of the said note was written before that of the signature or not.

The paper folded end to end across the middle. Prints of black ink were transferred from the black signature, and were found on the opposite side. In several places the blue and black ink of the dots were in conjunction. It was impossible to tell which was put on last, till a place was found where the bottom of a letter *y* and tip of a letter *h* came together over a dot, and showed the blue ink on top.

The same paper read, "*one day* after my death I promise to pay," etc. It showed clearly under the microscope that it had been written "one *year*," an erasure having been made and *day* written in.

The other paper was an alleged receipt for $2,000, paid on May 11th. That amount had been paid May 1st, and this alleged payment was denied to have been made. Examination by microscope showed that the first figure 1 of the date was in *brown*-black ink, while the second and the rest of the paper were in *blue*-black ink. Transfer had been made of the *brown*-black ink to the other end of the paper by folding, showing that it was put on last. The two shades of black show only under the microscope; to the naked eye they are alike.

DR. SQUIBB, in this connexion, referred to the following case: A number of U. S. bonds were stolen some time since from a party, and their payment stopped. For a long period nothing could be discovered in relation to them. Finally, however, two bonds with the same numbers were found in Wall Street, and it occurred to the parties concerned that one of these must be of the lot that had been stolen. The difficulty was to decide which was the genuine, and it was cleared up by a microscopical examination of the ruled lines upon which the figures were written in red ink. The magnifying glass showed the tracings of the old figures underneath the new, the red ink of the former having been previously removed by a chemical process.

DR. R. H. WARD, of Troy, next read a very lengthy paper with the following title: "Allopathy; an Inquiry into the relation of Sects in Medicine."

DR. CORLISS related a case of ovarian dropsy which he had tapped through the vagina.

DR. SQUIBB, in behalf of the Business Committee, stated that information had been received from Dr. Ives, of New Haven, that Elial T. Foote, a permanent member of the Society, had been a declared charlatan for many years. The said party was a resident of New Haven, and had done much, with such influence as he possessed, to damage the interests of the profession of that place.

A motion was accordingly made to drop the said name from the roll, which, after much discussion, was carried.

The Society then adjourned until 3½ P. M.

SECOND DAY—AFTERNOON SESSION.

The Society met at 3½ P.M., agreeably to adjournment. The meeting was called to order by the President.

DR. COBB moved that the Society request the Nominating Committee to present the name of Dr. Corliss for our next president. This was lost.

DR. W. WHITE made his report as delegate to the Maine Medical Society, which was referred.

DR. SQUIBB presented the report of Dr. A. N. Bell, from Committee on Hygiene. Referred.

A WORM IN THE AORTA (?).

DR. COATES, of Batavia, presented a portion of the arch of the aorta containing a lumbricoid which was discovered in that artery during a post-mortem examination of a soldier in the Ladies' Home Hospital, of New York city. The patient had died in 1864 of pneumonia, following an attack of measles. On attempting to remove the lungs by severing the vessels at their roots, the worm referred to was found alive in the cavity of the aorta. It was preserved *in situ*. The gentleman, Dr. Tozier, who forwarded the specimen, not having sent a complete history of the case, Dr. C. was unable to give any further particulars.

DR. SQUIBB pertinently remarked at this juncture, that in all probability the worm had accidentally found its way into the interior of the vessel after the death of the patient.

The Business Committee read by title a paper entitled, "Removal of Encephaloid Testicle," by Dr. Ferris Jacobs, and one on "Cæcal Inflammation and Ulceration complicated with Diseased Appendix," which were referred.

CASE OF INVERTED ACTION OF UTERUS.

DR. PETER P. STAATS, of Albany, reported a case of foot presentation which was accompanied with repeated and forcible recession of the parts. The feet were finally delivered, when a large retained placenta was found at the fundus.

DR. SQUIBB suggested that the placenta in that situation, acting as a splint, so to speak, interfered with the action of the uterine fibres, and gave a chance for those below to press the lower parts of the child upward.

DR. WM. B. BIBBINS offered the following resolution:

Resolved, That a physician of this State will not be received by this Society as an invited guest, unless he is either a member of a county medical society, or a member of the New York Academy of Medicine, or a member of the Faculty of a medical College, or a member of the Legislature.

Adopted.

DR. WHITE, of Buffalo, offered the following, which was adopted:

Whereas, Observations have been made, during an informal discussion yesterday in this Society, questioning the propriety of continuing the publication of the essay of Dr. G. J. Fisher on "Compound Monsters;" and *Whereas*, Dr. Fisher in his remarks intimated that he should "feel delicate about offering to the Society anything further on the subject."

Therefore *Resolved*, That this Society recognizes the scientific value of this essay, and earnestly requests Dr. Fisher to continue his monograph, and furnish it to the Committee of Publication.

Dr. Beadle moved the following: That the Committee on Pharmacology be directed to report to this Society the name of a member to supply the place in that Committee of Dr. Townsend, deceased. Adopted.

Dr. Squibb moved that the Society meet Thursday morning, at 9½ A.M.

On motion, the Society adjourned, to meet in the Assembly Chamber at 8 o'clock, to hear the President's Address.

The Society convened in the Assembly Chamber at 8. They were called to order by Dr. Tefft, Vice-President; after which the President, Dr. Gray, delivered his annual address.

The Annual Address.

The subject which had been chosen was the relation of the study of insanity to general medicine. After showing that insanity was properly a branch of general medical science, he gave an historical review of the progress which had been made in this study; and proved that it had been in proportion to its study as a branch of medicine rather than of mental philosophy. He stated that the ancients regarded it as a bodily disease, hence they were tolerably correct in their treatment; but during the middle ages it fell within the domain of philosophy, and was consequently misunderstood. In modern times its progress in Europe and this country had been due to the investigations of medical men taking it from the control of metaphysical speculators. He remarked that the history of the subject showed that, freed from the above-noted retarding influences, its progress had kept pace with that of general medicine, of which it was legitimately a part. Insanity was now recognized as a physical disease, and it should be taught as such in medical schools. The advantages of such teaching were then dwelt upon, after which some practical hints were offered as to how such a plan might be carried out.

The Society adjourned, to meet at 9.30 A.M. Thursday.

It was moved by Dr. Van Dyke that the thanks of this Society be tendered to Dr. Gray for his very able and interesting address. Adopted.

After the adjournment, the members assembled at the City Hospital, to respond to the invitation to an entertainment by Drs. March and Armsby. Telling addresses were made by Mr. Bogart, the Hon. Mr. Brooks, and others, after which all present partook of a bounteous and elegant supper.

Third Day—morning session.

The meeting was called to order by the President, and after a prayer by the Rev. Dr. Reese, of Albany, the minutes of the previous meeting were read and approved.

DELEGATES TO INTERNATIONAL MEDICAL CONGRESS.

Dr. Brinsmade, on behalf of the Committee of Delegates to the International Medical Congress at Paris, made the following report:—

The undersigned, delegates from this Society to the "International Medical Congress" held at Paris, on the 16th day of August, 1867, respectfully report:

That they might make sure of being duly admitted to the Congress, they called, on the 15th of August, at the office of the Secretary, M. Jaccoud, No. 4, Rue Drouot, with the certificates of their appointment by this society, and after sending up cards and waiting for some time in the ante-room, we were informed by the female concièrge that M. Jaccoud was engaged, but that we might record our names in a little book lying upon the table, and take a green "carte de membre adhérent," on which were the names of the President, M. Bouillaud, and the Secretary, M. Jaccoud, the filling up of which we were allowed to do as we might think proper.

Inasmuch as our credentials were not required, we of course reserved them for future use, if necessary. They were *never* called for, or examined by any officer or committee, showing to us that less discrimination was observed in order to give character and distinction to a scientific assembly than we were accustomed to in our own country. The card informed us of the *day* of the first séance, but neither the place nor hour of meeting was designated. After not a little inquiry we learned that the place was the great Hall of the "Faculty of Medicine." On presenting ourselves at the door, no cards or certificates were demanded, and we entered with the crowd to find seats for ourselves. The bare benches of the amphitheatre were arranged in the usual semicircular manner, without any support for the back; and gentlemen were compelled to step upon them to reach the forward seats, and in sitting were forced to use the one in front for their feet, bringing boots and coat-skirts in disagreeable proximity. The room was indeed a large one, but so imperfectly ventilated that respiration was quite difficult after remaining a few minutes. The dirty and uncomfortable seats, the heat, and the irrespirable atmosphere, prevented a majority of the audience from remaining during any entire session.

It did seem to us that in the elegant city of Paris pleasanter accommodations might have been secured wherein to receive *invited* guests, who were the accredited representatives of governments and of learned societies from all parts of the world. Your delegates deemed themselves honored by their appointment to represent so large a society from so large a State as that of New York, equalling in population and size several of the kingdoms of Europe; and confess that they felt themselves, in virtue of their office, entitled to some consideration.

But, according to French arrangements, *any* person having access to the ante-room of M. Jaccoud could avail himself of all the privileges procurable by the green ticket.

About the 6th of Jan. last your delegates received through the mail a ticket which seems to be intended as an acknowledgment—perhaps rather tardy—that they were entitled to the "Carte de membre adhérent." A large proportion of the audience seemed to be young men, perhaps young physicians, and medical students of Paris and vicinity. There were present, however, adding grace and dignity to the assembly, from cities, towns, and schools of continental Europe, many of the most distinguished medical men of the world.

Great Britain and Ireland sent but few, scarcely any, of their great surgeons and physicians. America was represented by some of our ablest men.

The names of Virchow of Berlin, Halla of Prague, De Méric of Brussels, Bérard of Montpellier, Baron Larry and Ricord of Paris, Frérichs of Berlin, Ernest Hart of London, Sangalli of Pavia, and of many others of equal celebrity, would confer honor upon any congress.

It was announced by the Secretary that on Saturday evening, Aug. 24th, a banquet would be prepared at "Le Grande Hotel" for those who would send their names, with a Napoleon, to the Secretary. About two hundred gentlemen were present at the dinner—members of the Congress, and other distinguished physicians from Paris and other cities on the Continent. The dinner was as at "Tables des Hôtes" in first-class hotels, with perhaps a few more courses, and a greater variety of fine wines. After dinner brief speeches were made by the President, M. Bouillaud, M. Palasciano of Naples, M. Teissier of Lyons, M. Jaccoud, M. Galligo of Florence, M. Piorry, M. Ricord, and Mr. Ernest Hart of London.

Your delegates received the most polite attentions from many distinguished members of the profession in Paris, and, although they feel that the result of the meeting has not been as useful to the cause of medical science as was anticipated, nor the extension of acquaintance equal to what was hoped for, yet many pleasant associations were formed, a healthful, vigorous, and generous emulation was excited, a wholesome and dignified "esprit de corps" was experienced; and I doubt not most of us, when recalling to ourselves the many pleasant and intelligent faces we have seen, the cordial greetings we have received, the evidences of ability and zeal manifested by medical brethren from various countries, will forget the uncomfortable seats, the irrespirability of the atmosphere of the Hall, and will be willing to make liberal allowance for differences in the arrangements and manner of conducting scientific associations and social reunions in different countries, and will remember with gratitude the originators and managers of the International Medical Congress, and this Society, who conferred the honor and gave us the privilege of representing it in this first attempt at an international assembly of men who do honor to their race by their benevolent efforts, and with whom all may justly feel pride in associating. The subjects of the papers which were read and discussed were some of the most important in medical science, and their character can be judged from the abstracts which have been published, and from the great ability of the authors and speakers. There was much talent exhibited, and many facts, deductions, principles, and practices were brought out which will make the first International Medical Congress long memorable.

It would be useless for your delegates to attempt anything like an analysis of the papers, as they will doubtless be published separately or together; and such ample notices of them have appeared in various medical journals, that members can obtain more correct views of their value than we shall be able to present in this report; and we simply subjoin the programme, giving the subjects in the order of their consideration, thinking it may be useful as a matter of reference.

(Signed.)

THOMAS C. BRINSMADE,
JOSEPH C. HUTCHISON,
HENRY S. DOWNS.

(Accompanying this report are the documents above referred to.)

REGISTRATION OF BIRTHS AND MARRIAGES IN THE STATE.

DR. LANSING, as chairman of the committee to present to the Legislature the subject of registration of births and marriages in this State, etc., made the following report, which was adopted:

The committee appointed at the last meeting of this Society, to present to the Legislature the subject of the registration of births, deaths, and marriages in this State, and to solicit the passage of a law providing for a thorough and efficient system of such registration, respectfully report:

That a hearing was granted your committee by the Judiciary Committee, both of the Senate and Assembly of 1866-67, and the subject duly brought before them, with such explanations and arguments on the part of your committee as seemed suitable to the occasion. The result of such interviews was an unfavorable report on the part of the committee of the Senate, who, while conceding the importance and desirability of such a law, seemed to doubt if it could be practically carried out, and to stumble at the fact of the present existing law on the subject, which remains a dead letter on the statute-book.

The committee of the Assembly noticed the subject favorably, and reported a bill substantially the same as the one contained in our last volume of Transactions, and the same was printed and placed on the files of the Assembly.

Owing to the multiplicity of other business before the Assembly, and the late period of the session at which it was brought before them, the matter failed of further progress.

The next step of your committee was to bring the subject before the governor, and a suitable memorial was prepared and submitted to him, with the expectation that he would communicate the same to the Legislature at its present session, with favorable recommendations for the passage of some such law as is desired by this Society.

It is believed that in such expectation your committee will not be disappointed.

Such is the present position of the matter in charge of your committee.

Its final success in the Legislature would seem to depend upon the merits of the measure itself, and the exertions of its friends.

Respectfully submitted,

T. F. BRINSMADE,
JOHN V. LANSING,
J. S. MOSHER,
F. B. HOUGH.

The report of the Nominating Committee was received, and on motion, it was adopted.

It was then moved to substitute the name of John P. Garrish for permanent member in the first district, for that of J. Marion Sims. Adopted.

The President, according to the action of the Society, cast a ballot in favor of the officers named by the Nominating Committee, excepting the first district, for which the Society balloted separately, with the result of the election of W. B. Bibbins and S. D. Hubbard.

OFFICERS ELECT FOR 1868.

The following is the report of the Committee of Nominations:—

For President—Dr. J. V. P. Quackenbush, Albany.
" *Vice-President*—Dr. James P. White.
" *Secretary*—William H. Bailey, of Albany.
" *Treasurer*—J. V. Lansing, of Albany.

FOR CENSORS: *Southern District.*—J. F. Jenkins, of Yonkers; Samuel H. Purdy, of New York; Edward R. Squibb, of Brooklyn. *Eastern District.*—B. P. Staats, of Albany; T. C. Brinsmade, of Troy; P. McNaughton, of Albany. *Middle District.*—M. M. Bagg, of Utica; C. B. Coventry, of Utica; A. F. Doolittle, of Herkimer. *Western District.*—Sandford Eastman, of Buffalo; Edward Hall, of Auburn; Alex. Thompson, of Aurora.

FOR COMMITTEE OF CORRESPONDENCE.—The present incumbents.

FOR PERMANENT MEMBERS: 1*st District.*—Wm. B.

Bibbins, Samuel T. Hubbard, New York. *2d District.*—Clark A. Nicholson; Lewis H. White, of Fishkill. *3d District.*—J. V. Lansing, of Albany; J. R. Boulware, of Albany. *4th District.*—John P. Shaver, of Little Falls; Isaac J. Buckbee, Fonda. *5th District.*—William Russell, of Utica; Alonzo Churchill, of Utica. *6th District.*—E. G. Crafts, Binghamton; E. Odell, Unadilla. *7th District.*—H. D. Didama, Salina; H. N. Eastman, Geneva. *8th District.*—John F. Whitbeck, of Rochester; David Little, of Rochester.

ELIGIBLE FOR PERMANENT MEMBERSHIP: *1st District.*—Edward H. Janes, of New York; George F. Shrady, New York. *3d District.*—P. V. S. Pruyn, of Kinderhook; Wm. Lamot, of Charlotteville; Jacob S. Mosher, Albany; Wm. H. Craig, Albany. *4th District.*—Francis Burdick; Henry H. Greene, of Paine's Hollow. *5th District.*—J. K. Leang; Robert Frazier, of Camden. *6th District.*—L. Griffin, Binghamton; J. W. Thompson, Schuyler Co.; J. Dolson, Bath. *7th District.* A. W. Marsh, of Palmyra; H. C. Hendricks, of McGrawville; E. J. Schoonmaker, of Magee's Corners. *8th District.*—M. W. Townsend, of Bergen; Charles E. Rider, Rochester; Julius F. Miner, of Buffalo.

FOR HONORARY MEMBERS.—N. D. Benedict, Florida; Joseph K. Barnes, Surgeon-General U. S. A.; Isaac Ray, Providence, R. I.; Thomas S. Kirkbride, of Philadelphia.

ELIGIBLE FOR ELECTION AS HONORARY MEMBERS.—Prof. Stokes, Dublin; Prof. Rawdon McNamara, Dublin; Dr. H. C. Lombard, Geneva, Switzerland; Dr. T. R. Varick, Jersey City, N. J.; Dr. Wm. Livingston, St. John's, N.B.; Sir James Y. Simpson, Edinburgh.

FOR HONORARY DEGREE OF DOCTOR OF MEDICINE.—Lewis Post, Lodi.

DELEGATES TO THE NATIONAL QUARANTINE CONVENTION.—Present incumbents.

DELEGATES TO CONNECTICUT STATE MEDICAL SOCIETY.—J. C. Hutchison, Brooklyn; Philander Stewart, Peekskill; E. S. F. Arnold, Yonkers; Arthur S. Wolff, Plattsburgh.

DELEGATES TO MASSACHUSETTS STATE MEDICAL SOCIETY.—J. F. Jenkins, Yonkers; H. D. Bulkley, New York city; G. J. Fisher, Sing Sing; Alden March, Albany.

DELEGATES TO NEW JERSEY STATE MEDICAL SOCIETY.—Ferris Jacobs, Delhi; Samuel Hart, Brooklyn; Frederic Hyde, Cortlandville; Wm. Govan, Stony Point.

DELEGATES TO NEW HAMPSHIRE MEDICAL SOCIETY.—M. R. Holbrook, of Poughkeepsie; Hiram McNutt, Warrensburgh; E. R. Peaslee, New York; W. B. Bibbins, New York.

DELEGATES TO THE VERMONT STATE MEDICAL SOCIETY.—Drs. Francis Burdick, Johnstown; J. G. Orton, Binghamton; Thompson Burton, Fultonville.

DELEGATES TO PENNSYLVANIA MEDICAL SOCIETY.—Drs. Caleb Greene, Homer; W. C. Wey, Elmira; George Burr, Binghamton; H. C. Stiles, Brooklyn.

DELEGATES TO OHIO STATE MEDICAL SOCIETY.—Drs. C. C. Wyckoff, Buffalo; Sanford Eastman, Buffalo; Thos. F. Rochester, Buffalo; H. W. Dean, Rochester; H. H. Langworthy, Rochester.

DELEGATES TO MAINE MEDICAL SOCIETY.—Drs. Ellsworth Eliot, New York; E. L. Beadle, Poughkeepsie.

DELEGATE TO RHODE ISLAND STATE MEDICAL SOCIETY. Dr. J. H. Burger, Brooklyn.

DELEGATES TO AMERICAN MEDICAL ASSOCIATION.—The present incumbents, leaving out H. A. Carrington, C. S. Wood, Seth Shore, C. M. Crandall; and adding Wm. Govan, Stony Point; Joseph Bates, J. P. White, Buffalo; H. N. Eastman, Geneva; J. F. Jenkins, Yonkers; E. S. F. Arnold, Yonkers.

COMMITTEE ON STATISTICS.—Present incumbents.

COMMITTEE ON PRIZE ESSAYS.—Present incumbents.

COMMITTEE ON PUBLICATION AND REVISION OF BY-LAWS.—Present incumbents.

DR. C. A. LEE then proposed the following resolutions in regard to an amendment of the By-Laws to be offered for consideration at the next meeting, February, 1869:

1. *Resolved*, That the by-law of the New York State Medical Society, requiring the President and Vice-President to be nominated by a committee appointed by the President, is hereby repealed.

2. *Resolved*, That, hereafter, in all elections for officers, the President and Vice-President, it shall be done by ballot by open nomination in convention, and that whoever shall receive the largest number of votes, shall be declared elected.

3. The election shall take place on the second day of the meeting, during the morning session.

After considerable discussion, the Resolutions were laid on the table, with the understanding that they be taken up and considered at the next annual meeting, the President elect also having intimated that he should call the attention of the Society to the subject, in his opening address.

DR. J. G. ORTON, through Dr. Saunders, offered the following:

Resolved, That the Standing Committee on Statistics be instructed to issue a suitable circular under the direction of the Publishing Committee, inviting reports from the profession of any epidemics which may prevail during the present year in this State. Adopted.

Dr. JOSEPH C. HUTCHISON offered the following:

Resolved, That the chairman of the delegates from this Society to the American Medical Association, be requested to present to said Association, as the desire of the Medical Society of the State of New York, the following resolution, and to urge its adoption:

Resolved, That the Faculties of the several Medical Colleges of the United States be recommended to announce explicitly in their annual commencement circulars and advertisements, that they will not receive certificates of time of study from irregular practitioners, and that they will not confer *the degree* upon any one who may acknowledge his intention to practise in accordance with any exclusive system. Adopted.

Business Committee read by title the following paper:

Report of Cholera at Quarantine, by Dr. John Swinburne, for 1867.

Moved that the Secretary be directed to advertise three times the prizes offered by this Society in the medical journals of this State. Carried.

On motion of DR. BIBBINS, a vote of thanks to the State Agricultural Society was passed, for the gratuitous use of the Agricultural Society Hall during the session of the Society. Adopted.

Business Committee read by title Carbolic Acid, by D. P. Bissell.

DR. BISSELL moved that the thanks of this Society be tendered the Committee of Arrangements, for the good accommodations and comfortable arrangements made for this Society. Adopted.

Resolved, That the thanks of the members of the Medical Society of the State of New York be tendered to Drs. Marsh and Armsby, for the kind and generous hospitality tendered to them at the Hospital Building on Wednesday evening, March 5, 1868. Adopted.

DR. BRINSMADE, on behalf of the committee appointed to memorialize the Legislature, asked that the committee be continued. Granted.

DR. SQUIBB offered the following, which was adopted:

Resolved, That the thanks of the Society are due, and hereby tendered, to the President and other officers of the present annual session.

Resolved, That the thanks of the Society are tendered to the reporters who have been present, and have reported the transactions.

Dr. C. A. Lee moved, That the thanks of this Society be given to Dr. E. R. Squibb, for the very able manner in which he has performed his duties as Chairman of the Business Committee. Carried.

DOES THE NEGRO HAVE DELIRIUM TREMENS?

Dr. B. P. Staats stated that he had considerable experience in the treatment of delirium tremens in the County Penitentiary, and had never seen one case in a negro. He asked the experience of members present.

Dr. Brinsmade, as chairman of the Committee to try the case of Dr. N. K. Freeman, reported progress, and asked that the Committee be instructed to report at the next meeting. The request after a little discussion was granted.

The Society then adjourned to the first Tuesday in February, 1869.

Progress of Medical Science.

Cubebic Acid.—The curative power of cubebs has been found to reside in cubebic acid, a crystallizable constituent, and not in the volatile oil or resins. From eight to thirty grains of this in pill, in twenty-four hours, completely cured three out of five patients in six days. In the remaining two the discharge was very much diminished, so that a few injections removed it.—*Am. Jour. Med. Sciences.*

Ossified Placenta.—Dr. Galloway, of Canton, Miss., has met, during twenty years, with eight cases. In every case the child was well developed, and the mother convalesced as usual. He makes it a rule to inspect the placenta in all cases.—*Am. Jour. Med. Sciences.*

Sub-luxation of body of sternum, producing a depression of over half an inch at the lower part of the manubrium, was reduced by Dr. M. Forster, of Shomdale, Ontario Co., as follows: He threw the head and shoulders backward, so as to draw the clavicles upward, and produced tension of the pectoral muscles, so as to draw them outward, and then by repeated deep inspirations succeeded in forcing the manubrium upward and outward.—*Am. Jour. Med. Sciences.*

Zymotic Nature of Rheumatism.—Prof. J. H. Salisbury, of Cleveland, contributes to the *Am. Jour. Med. Sciences* quite a long article upon the varieties of rheumatism and their treatment. He concludes that there are four principal types, which he names from the substance found in abnormal quantity in the blood and secretions, and excretions, either lithic, oxalic, cystinic, or phosphatic. He finds uniformly in every variety in blood and urine, and even upon the skin, a cryptogam, which he calls *Zymotoses translucens*, consisting of very minute spores and filaments, which are highly refracting, of faint outline, and which soon become nearly invisible when placed between the slides. The following directions are given: "Make an incision in the arm; a drop of blood quickly pressed out and received upon a slide should at once be covered with thin glass and watched to observe the manner in which the red discs arrange themselves, and the condition of the colorless corpuscles. Very soon little gaps will appear from the aggregation of the red discs, in which will be seen colorless corpuscles (fibrin cells) more or less aggregated, and here and there masses of minute spores, and occasionally ropes and knots of algoid filaments. As soon as the blood becomes quiet, it will be found to arrange itself to some extent in ropy rows or masses. Crystalline matters are also occasionally met with. The characteristic fungoid is also found in the urine, which, in oxalic and crystinic rheumatism, in the morning, contains the corresponding morbid excretion. The treatment of each variety is detailed at some length, but contains no especially new features.

Chloroform in Otalgia.—Dr. C. C. Shoyer, of Leavenworth, Ka., relieves earache almost immediately by introducing about half a drachm of chloroform into the meatus externus.—*Am. Jour. Med. Sciences.*

Prolonged Gestation.—Dr. P. M. Rivers, of Waterboro', S. C., relates a case in which a hydrocephalic fœtus was retained in utero until the completion of the twelfth month. The mother was troubled with abdominal pains at term, but these subsided after three days.—*Am. Jour. Med. Sciences.*

Muscle Sugar.—In August, 1861, G. Meissier announced his discovery of a true sugar in muscle. Dr. J. Rauke has reinvestigated the subject and fully confirms Meissier's supposition. The following propositions are considered as established: First. That there exists a true fermentable sugar in muscle. Second. That the amount of this sugar is increased by muscular action, including tetanization caused by strychnine or electricity. Third. That the liver has no effect in causing this increase; for the sugar is proved to arise in the muscle itself, and from the muscular substance.—*Am. Jour. Med. Sciences.*

Source of Muscular Energy.—Profs. Fick and Wislicenus give an account of an experiment which seems conclusively to show the error of Liebig's theory that muscular power is derived from the oxidation of muscle, and the truth of that advanced by Bischoff and Voit, that the oxidation of hydro-carbonaceous material is the source of that power. They ascended the Faulhorn, a peak of the Swiss Alps; during the ascent, for eighteen hours previous and six hours after it, they took hydro-carbonaceous food only, and it was found that the great muscular exertion had but very slightly increased the amount of urea excreted, and that during the six hours after the ascent even less urea was excreted than before starting. Had the source of muscular power been the oxidation of albuminous material, the urea excreted during and shortly after the ascent ought to have undergone a very decided increase. They do not deny that muscle is wasted to some extent during contraction, but they conclude that the oxidation of albuminous substances bears a very small proportion to that of hydro-carbonaceous material. Prof. Parkes has recently experimented with a view of ascertaining the correctness of these conclusions, and confirms them in the following propositions: Firstly. That on a non-nitrogenous diet of fat, starch, and sugar, exercise produces a slight but unimportant increase in the amount of nitrogen excreted both by the kidneys and the intestines. Secondly. That during the period of actual work, the amount of urea is diminished, proving that changes take place which cause either a retention of the nitrogen or an elimination by another channel. It is evident, then, that the quantity of urea excreted cannot be taken as an index of the amount of waste which the tissues have suffered. Thirdly. That amount of force expended during excretion is not merely the result of the oxidation of the muscular, nervous, and other nitrogenous tissues of the body, which can, in fact, represent only about one-fifth of the entire quantity, but that a most important share in its production is taken by the non-nitrogenous elements of the food, previous to their transformation into tissue.

Excretion of Urea.—Dr. L. R. Noyes has communicated to the *Am. Jour. Med. Sciences* the results of four weeks' experimentation, to discover the effects of food and exercise upon the excretion of urea. The subjects had for years been accustomed to an almost exclusively vegetable diet. He concludes that the urea is a measure of the metamorphosis of the tissues, rather than of surplus albuminous matters in the blood. His tables, however, seem to show that it was increased by both. All four subjects lost weight during a week of animal diet. The quantity of urine was increased twenty per cent. The sp. gr. rose from 1,020 to 10,245; the urea, however, rose 169 per cent. The total solids rose sixty-six per cent. The chlorides varied but little. The urea, then, was the substance chiefly affected by the change of diet. A vegetable regimen diminished the quantity of urine twenty-eight per cent. The sp. gr. fell from 10,245 to 1,020. The total solids diminished forty-two per cent. The urea fell seventy-five per cent. All the subjects gained in weight. He finds that during exercise the urea excreted is proportioned to the fatigue experienced. The subject who exercised most was accustomed to long walks, and suffered no fatigue. His urea was *diminished*, while the female, who took the least exercise, was most fatigued and excreted the greatest additional amount. Two cups of strong coffee were taken with each meal, instead of water, for another week. The urea increased fourteen per cent. No material change was noticed in either the quantity, the sp. gr., or the total solids. Again, the twenty-four hours were divided into two equal portions, in each of which he took one meal, both being alike, exercised, and lay upon the bed the same number of hours; the only difference being that during the day he lay awake, studying, while at night he slept. The *quantity* of urine during the day was very nearly double that during the night. The sp. gr. varied from two to five degrees, being lower during the day. The *total solids* of the day exceeded those of the night by seventy per cent. The reaction of the night urine was strongly acid, while that of the day was distinctly alkaline. The urea during the day exceeded that of the night by thirty-one per cent.

A Useful Modification of the Catheter.—Dr. T. Warden, *Lancet*, has made the following improvement in the construction of the catheter, which specially adapts itself to the wants of those patients upon whom the instrument has to be used while they are confined to their beds. From the lower side of the instrument, about three inches from the extremity, a tube is led, having about the same curve as that at the bent end. The catheter now presents the appearance of an elongated letter S, with a projecting piece at the angle of the upper curve. This part is impervious, merely serving the purpose of a handle, which may be made flattened if desired; the curved portion, which points downwards, is continuous with the tube, and has its orifice closed in the ordinary way with a wire and head. By the direction of this part, the stream can be safely directed into any kind of vessel, without the chance of wetting the patient's bed or the hands of the operator.

Granular Detritus of Elements in Process of Cadaveric Alteration.—Another very important particularity which anatomic elements present in proportion to their putrefaction, is their reduction into molecular granulations, very fine, grayish, very numerous, and gifted with very active Brownian movement. The production of these fine granulations is a phenomenon subsequent to that of the exudation of sarcodique (fleshy) drops (or gouts), and others, described above; it does not show itself until the odor of putrefying animal substances is already very manifest. The demi-solid, anatomical elements, whatever they may be, fibres or cellules, if they are homogeneous, without granulations, finally become finely granulous, in a uniform manner throughout their whole thickness. At the same time, the contour of these elements becomes pale, badly determined, and the delicate molecular granulations, floating in the liquid, become more and more abundant as these peculiarities are pronounced more decisively.—*Charles Robin in La France Médicale, Oct.* 16, 1866.

The Treatment of Infantile Diarrhœa.—Dr. Buiz (*Jour. Pract. Med. and Surg.*) expresses the following opinions, as the results of his experience, on this subject: "1. The diarrhœa of spoon-fed infants generally yields to the addition of a small quantity of bicarbonate of soda or of lime-water to the milk. 2. In summer-diarrhœa supervening without any tangible cause, from one-sixth to one-quarter of a grain of calomel three or four times a day, associated with an equal amount of ipecacuanha, will often be found efficacious. If the indisposition is consequent on exposure to cold, minute doses of opium are appropriate. 3. Chronic diarrhœa resulting from various causes may in most cases be checked with nitrate of silver, one-sixth of a grain of which may be exhibited without risk. This remedy is sometimes, however, rejected by the stomach, and should then be replaced by tonics and vegetable astringents. 4. Diarrhœa combined with anæmia and impaired nutrition, is often the result of a state of decomposition of the blood, for which the best remedy is the proto-iodide of iron. In such cases bismuth is frequently unavailing; whereas in doses of half a drachm three times a day, it is invariably successful against intestinal relaxations referable to tubercular ulceration. The causes of intestinal catarrh are, however, so obscure, that in many instances the treatment must be empirical."

Prevention of Chloroform Sickness.—It seems that the plan of administering a few drops of chloroform in water to prevent sickness, proposed by Mr. Chesshire, has been tried by Mr. J. Vose Solomon, of the Birmingham Eye Hospital, and others, and has been abandoned. He says (*British Medical Journal*): "The results of this practice, as observed by me at the Birmingham Eye Hospital, may be briefly summed up as follows: Where the patient had not been specially prepared for the inhalation, the whole contents of the stomach were rejected; where the precaution of allowing only a small breakfast of tea and toast at an early hour in the morning had been taken, some were sick, and some were exempt from that troublesome complication. There was no certainty. The prevention of sickness and retching during and after inhalation of chloroform, I find best attained, in private practice, by obliging the patient to breakfast, four or five hours before operation, upon the lean of a small, well-cooked mutton chop, four ounces of tea or coffee, and a bit of toast. In persons of highly-nervous temperament, or whose hearts are feeble, the administration of three ounces of hot brandy and water twenty minutes prior to commencement of inhalation, facilitates the action of the anæsthetic, prevents gastric disturbance, and insures satisfactory cardiac action. If the patient be kept entirely without food, or permitted to take only a cup of tea and a little toast for the early morning meal, retching of distressing urgency has been frequently observed. When the patient is much excited by the thought of the contemplated surgical procedure, the process of digestion becomes arrested, and food in a crude state is discharged by emesis.

TREATMENT OF ALBUMINOUS NEPHRITIS.—This refers simply to parenchymatous nephri is, and the treatment is only applicable to the first two stages of the complaint (congestion and exudation), and is not indicated in the third (degeneration). It consists in the administration of iodide of potassium, in large, *increasing* doses: give two or three grammes at first, then increase a gramme, every two or three days. A daily dose has thus been easily borne of from fifteen to twenty grammes. In conjunction with the iodide of potassium can be administered the iodide of iron, perchloride of iron, tannin, etc.—*M. Crocq, Medical Congress.—Gazette Hebdomadaire.*

STROKES OF THE HEART AND PULSE REPRODUCED BY PHOTOGRAPHY.—Dicrotism, that is to say, the double beat, has been described by M. Marey as a normal state of the pulse. Before the invention of the Sphymograph, it could not be determined except in certain pathological cases, as the precursor of hæmorrhages. Our photographic apparatus corroborates the assertion of my wise brother, but at the same time settles the question in a much more definitive manner. It demonstrates, indeed, that the pulse is not only *dicrotic* but even *triple* in certain cases, and that after mounting, as it were, at a single bound to the summit of the scale, it redescends by three successive falls to the inferior level. According to my observations, already numerous, the first undulation corresponds with the impulsion of the left side of the heart, the second should be due to the right side. Now the third—is it due to the elasticity of the arteries, or to the contraction of the auricles? That is a point which has not yet been demonstrated.—*M. Chas. Ozanam in Gazette Hebdom: Sept.* 6, 1867.

IDIOPATHIC BUBO AND SECONDARY SYPHILIS.—1st. BUBO, for which we can give no cause (*bubon d'emblée*), cannot be explained in the great majority of cases by the simple excitation accompanying coitus.

2d. It should be considered as making part of the array of venereal symptoms, under the same title as indurated chancre, soft chancre, blennorrhagia, balanitis, warts, etc.

3d. Facts, most scrupulously noted, will not allow us to doubt that it can, in exceptional cases, be followed by constitutional syphilitic taint.

4th. It would be desirable that statistics bearing on a great number of cases should be carefully prepared, so that the degree of frequency of unaccounted-for bubo, and the cases in which it is followed by secondary syphilis, might be established.—*Dr. Bourguet, of Aix.—Medical Congress.—Gazette Médicale de Paris, Oct.* 26, 1867.

NEW OPERATIONS ON THE EYE.—M. de Graefe took occasion to communicate three new surgical operations with their procedure.

The first has for its object the *section of the optic nerve*, in cases of remaining subjective luminous sensation, in particular affections, to the loss of the eye, and the occasion of deep troubles in the life of the patient.

The second consists in the *partial tenotomy of the elevator of the upper eyelid*, in Bandow's disease.

The third concerns the most recent modifications practised by the learned professor in his *method of linear extraction of cataract.* This modification consists in the suppression of every tractor instrument for evacuating the crystalline. Since the introduction of this modification, the number of cases of procidentia of the vitreous body has been diminished, in the proportion of from 14 in 100 to 3 in 100.—*Gazette Hebdom: Sept.* 13, 1867.

PHTHISIS AMONG THE JEWS.—While the villagers in the country where I practise are generally exempt from phthisis, the Jews are very much subject to it, so much so that the extinction of the race can be predicted in two or three generations. Bad food seems to be exclusively the cause. Meats and all substantial nourishment are forbidden fruit for them. Thin, emaciated, pale, they ever present the aspect of the "Wandering Jew." And their marriages at sixteen or eighteen years may likewise contribute to this extreme mortality. It is not climate or locality which operates in this case, but alimentation. For the most part remedies, as iodine, iron, and sulphur, act simply and only by developing the appetite. Garlic seems to be the principal nourishment of the Jews. Baths of whey (petit-lait), much employed in Austrian Gallicia, in Hungary and Bessarabia, are the most efficacious remedies.—*M. Dropsy, Medical Congress.—Gazette Hebdom: Aug.* 30, 1867.

HOLES BY BULLETS.—Bullets which penetrate in an earth half moist, like clay, make a hole larger at the entrance than at the exit. To determine this, construct a massive frame of timber and fill it in for five or six yards with clay. In firing now with a shot No. 24, the hole presents the appearance of a funnel, having a diameter of one yard and thirty centimetres at the entrance, and of fifteen centimetres at the exit. This effect is due to the transmission or not of motion, by the air. This can be proved by examining a section of either of the orifices. It is always composed of a circle with small concentric arcs, showing interruptions darkened by the sulphurous gases carried along with the bullet. In making up the total of these elements, we find exactly the length of the circumference of the projectile. The effects of communication of movement are moreover more energetic when the clay is somewhat compressed. All the resistance of the centre to the penetration is represented by two conditions—the one is dependent on the swiftness, the other is proportional to the square of this swiftness, whence we deduce the equation of the curve which is a logarithm, even as such is designated in geometry. When we turn over the profile impressions next morning we can determine a diminution in the length of all the diameters obtained, which proves that clay is gifted with a certain elasticity, which only shows itself at the end of a certain time.

The same effects have been observed on experimenting on masonry, but they are less appreciable.—*Moniteur.—From La France Médicale, October*, 1867.

ANEURISMAL TUMORS OF ARTERIES.—It seems that M. Gosselin (of late appointed as professor in the Surg. Clinic of la Charité), recently laid before the Academy of Sciences a paper on *Aneurismal Tumors of Arteries.* He has left the beaten road, and takes different ground. In this relation, *la France Médicale* says:

Contrary to the old practice, the new surgeon of *la Charité* rejects alike the ligation of the branches which nourish the tumor, or of the principal trunks of one or both of the primitive carotids, for example, when these tumors have their seat by the head, as is often the case. He has the same views, likewise, in regard to the total ablation of the tumor, which he considers as dangerous, and which indeed is only applicable in season, except where these tumors present a large surface. He prefers to all these different means, the often-repeated injection of the perchloride of iron, thrown even into the very course of the tumor. Without doubt this treatment has its inconveniences. After the injections, we may see now and then small ulcers, very exuberant and rebellious, showing themselves, by which a quantity of clots escape—these clots due to contact with the perchloride—and they retard for a long time the case. But the final result is none the less favorable.

It may happen, likewise, that phlegmasia, induced by

the perchloride, terminates in suppuration, and gives rise to consecutive hæmorrhage. In such an event, M. Gosselin employs the actual cautery, as much with a view of arresting hæmorrhage, as to complete the obliteration of the vascular tumor, and his success has decided that he was right.—*La France Médicale, Oct.* 16, 1867.

Evulsion of Arm and Scapula by Machinery.—Recovery.—Dr. Lowe, of the West Norfolk and Lynn Hospital, publishes (*Lancet*) a case of the above which is an example of an operation done accidentally, resembling that recently performed by Sir William Fergusson, and reported some time since in our columns. The patient, æt. eighteen, had his whole upper extremities drawn into the carding-machine of a flax-mill and torn to pieces. The wound was closed up immediately after the man was rescued, and the vessels were so much torn that there was very little hæmorrhage. When admitted into the hospital he was in a state of collapse. The wound having been opened, it was found that the entire upper extremity had been torn away, and the clavicle exposed over its outer half. The skin was divided almost as evenly as by a knife, and formed good anterior and posterior flaps. Over the breast and side of the face the surface was marked with lines of scratches caused by the teeth of the carding-machine. The artery and nerves, denuded to the length of four inches, were found lying in the wound, the former pulsating strongly to within a quarter of an inch of its extremity. The patient was put under the influence of chloroform, when Dr. Lowe separated the vessel and ligatured it, cutting off its exposed part as well as that of the nerve-plexus, and also removed about the outer third of the clavicle. The wound was brought together by three loose sutures, and a compress and bandage applied. The patient made a good recovery, and was in a fit condition to be discharged from the institution thirty-five days after the injury.

Several instances of a similar accident are on record. In some cases no ligature has been required. This was so in the case related by Belchier ("Philosophical Transactions," vol. xl.), and in one by James (*London Medical Gazette*, vol. v.). Other cases in which, as in Dr. Lowe's, the subclavian artery was tied, will be found described by Scarnell (*The Lancet*, 1832, p. 114), and by Cartwright (*Boston Medical and Surgical Journal*, 1837). There is also a case of Mr. Lizars' mentioned in Fergusson's "Practical Surgery," as well as reference to others described by Cheselden, Carmichael, King, and Dorsay.

The Treatment of Syphilitic Bubo.—A recent number of the *Lancet* gives a full and interesting account of the treatment of syphilitic bubo in the out-patient department of the different London Hospitals. The following may be considered the main points in said treatment: First, *rest;* second, pressure, if it will be tolerated; third, leeches; fourth, poultices, when suppuration is inevitable; fifth, a free and early incision to evacuate the contents of the abscess; sixth, a general anti-syphilitic and tonic course.

Oil and Soap of Quinine.—M. Flandrin gives the following formula for oil of quinine for external use, especially for children who refuse to take it by the mouth. Quinine, according to M. Flandrin, is soluble in about ten parts of warm and fifteen parts of cold oil. He recommends the following formula: Pure quinine, one part; oil (freed from humidity), fifteen parts. Pestle the mixture in a mortar thoroughly; pour the whole into a capsule and heat it, agitating gently till complete solution has occurred. Preserve in a dry and well-corked bottle. M. Tripier (*Journal de Médecine et de Chirurgie*), a medical officer of the army of Africa, recalls the services which soaps of the alkaloids, including quinine, have rendered him in his practice. He gives the following formula: Stearine, two parts; sulphate of quinine, one part. Warm till solution, and add a little lard to give the consistency of honey. Rub this into the armpits, groin, and plantar surfaces.

Vaccination Cicatrices and Revaccination.—Chas. E. Buckingham, on this subject, contributes the following statements to the *Boston Medical and Surgical Journal*: 1st. He has vaccinated those who have never been vaccinated before, and who never had had variola, with failure for the result. The vaccination has been repeated from the second week after birth, at various intervals, up to more than ten times, and in one case over twenty times, without success; the result sometimes being a little soreness of the skin, sometimes severe soreness, and sometimes without any apparent irritation of the skin. The matter used has been good, if the fact that a portion of the same was used successfully upon other arms be taken as evidence. 2d. He has been led to question whether the disease may not have taken the first time some of them were vaccinated, and whether they may not have vaccinia without vesicles; as many believe that patients have had scarlatina without eruptions, and measles without catarrh, and have been afterwards exposed without apparently being able to have these diseases. There is no one symptom which must exist in every case of another disease. Why not in vaccinia? 3d. He has seen virus, taken from the same arm and introduced into two others, produce in the one case the most perfect, sound, umbilicated vesicle, which, without severity, went through its regular stages; and in the other, a state of general constitutional irritation, ending in suppuration, without the first sign of vesicle. 4th. He has known two cases to terminate fatally. In one of these the virus did its work as well as in other cases. 5th. He always hesitates more about vaccinating an adult than a child, because more frequently severe symptoms follow in the adult than in the child. 6th. He has frequently advised against revaccination, because of the severe symptoms following. 7th. If not susceptible of vaccinia, the thorough introduction of its virus into one man's arm, will produce no effect; if introduced into another man's, it may act as an animal poison, and pyemia may follow. 8th. It is not improbable that the state of the patient's system may explain many of the deaths following vaccination in rebel prisons. 9th. He has seen perfectly normal-looking vesicles followed by cicatrices both large and "small, circular, marked with irradiations and indentations," and then afterward reduced to "miserable, white, flat specks," and has been unable to produce, in the possessors of these specks, anything but sore arms and headaches by revaccination. 10. The history of vaccination, for twenty years past in foreign armies, is not enough to prove the success, or necessity, or impropriety of revaccination, any more than twenty years' absence of spotted fever from Boston, or the successful result of quinine treatment of erysipelas and puerperal fever at the South Boston Almshouse, is enough to prove anything.

Gunshot Wound of the Neck, with Injury of Spinal Cord.—Private G—— was found the morning after a battle with "his neck broken." He was carried a quarter of a mile to a hospital, where he remained a few days. He was, after a few days, moved some distance, to secure better attention. After three weeks he was again moved about a quarter of a mile. The fifth day after the wound he suffered greatly, complaining of his neck and bowels; the latter being extremely pain-

ful, pulse 142, extremities cold, and excessively restless. It was found that the ball had passed through the neck, and, as well as could be ascertained, had cut across the spinal marrow. He lived fifty-one days, and finally succumbed, from dysenteric symptoms, attended with extreme and persistent nausea. Before the development of dysenteric symptoms, his bowels gave him so much pain that spasms and tetanus were thought to be imminent. Voluntary motion was almost entirely lost; he had but little use of his left hand. His evacuations were but partially under his control. On the fifty-first day he died. An examination revealed that the ball had passed through the lamina of the fourth cervical vertebra, severing entirely the lamina attached to the vertebra from the spinal portions, so that the spinal portions of the bone were lying loose in the half-formed sac around the injured bone. The sheath of the spinal marrow, posteriorly, was cut across, and about two-fifths of the spinal marrow was severed. The internal wound, including the sheath of the cord, was filled with a sanious, offensive pus, tinged with blood.—*Atlanta Medical and Surgical Journal.*

Diphtheria.—Dr. Reuben Searcy, of Alabama, thus speaks of his experience in the treatment of this disease: I now treat it with a saturated solution of chlorate of potash, acidulated with muriatic acid; *i. e.*, 100 grains of the potash, in four ounces of water, adding one drachm of muriatic acid. To a child of ten years old, give a teaspoonful every two hours, in sweetened water, and less to younger children. I directed two pieces of fat bacon to be sewed to a piece of cloth, and bound to the neck over the tonsils, and to be worn until after convalescence.* When the skin is hot and dry, rub the patient all over with a piece of bacon rind, then wash off with warm water and soap. This always lessens fever, producing sleep and perspiration. This should be repeated as often as the hot skin requires. Gentle aperients, gruels, teas, etc., should be directed, but an active purgative or emetic should never be used.—*Atlanta Medical and Surgical Journal.*

The Ligature and Mr. Syme.—Mr. Syme has bid adieu to the use of the ligature, save in the tying of the larger arteries. He employs torsion; and after this operation is completed, he clears out the wound, using a weak solution of carbolic acid and water (one part to thirty), and covers the whole over with a paste containing carbolic acid, chalk, and other ingredients.

Development and Treatment of Albuminuria.—W. F. M., a correspondent, thus writes: In view of the notorious inefficacy of our treatment of Bright's disease, I thought the following note might be interesting. It is a condensation of an article read before the French Academie Impériale de Médecine, by Prof. Semola of Naples, and is the complement of a previous memoir by the same author. In his previous communication Prof. Semola developed the opinion that the passage of the albumen into the urine, in Bright's disease, was the necessary consequence of a general deficiency of nutrition by which the albumen, rendered incapable of performing its functions, was eliminated by the kidneys as a substance foreign to the organism. According to this theory, the alterations of these organs would play only a secondary rôle in the development of the disease; and although the condition of the kidneys is of value in prognosis, Prof. Semola protests against the ideas of those who pretend to explain or resolve the question by purely anatomical deductions.

One diagnostic sign distinguishing organic from symptomatic albuminuria is furnished by the quantity of the urea, which in true Bright's disease diminishes with the first appearance of the albumen, and, at a later period, accumulates in the blood. The same is true of the sulphates. Of the artificial albuminurias, that produced by the suppression of the cutaneous functions is the most like Bright's disease. This suppression both prevents the oxidation of the materials introduced into the system in the form of peptones (the products of the digestion of albumen), and causes a congestion of the viscera, and especially of the kidneys.

Thus, according to this author, Bright's disease is not the result of a primitive anatomical lesion of the kidneys, but is a result of this double series of effects which succeed the more or less sudden suppression of the functions of the skin.

The aim of the physician should be to reëstablish these functions, and thus increase the oxidation of the peptones, and relieve the renal congestion.

Among the means best suited to this purpose are the ordinary sweatings, or, in obstinate cases, hot-air baths, always followed by cool or cold shower-baths; preparations of arsenic, and inhalations of oxygen. The diet should be vegetable or starchy, with but very little meat.

Lithotomy—the Bilateral Operation and Double Lithotome.—It is clear to my mind that first, the anatomy of the part; second, the thing to be accomplished (viz.: the extracting of the stone of large or small size, as the case may be); and third, the importance of simplifying as much as possible all surgical operations, forces the fact upon the mind of every operator that the bilateral operation is the one to make, and that the double lithotome is the instrument with which to make it.

As every operator knows, who is at all acquainted with this operation, how the perineal incisions in both methods of operating are made, it is only necessary to speak of the most important points in the operation. It is an admitted fact that the danger of cutting the internal pubic artery consists in lateralizing too much, while that of wounding the rectum is in not lateralizing enough; now this being the fact in the case, it is certainly apparent to the mind of every surgeon that as the lithotome regulates itself as to the amount of lateralization necessary, there cannot be so much danger in the hands of an operator of dividing the pubic artery as there would be by using the bistoury, and by simply depressing the handle of the lithotome and withdrawing the instrument with the back of the sheath of the blades resting in the groove of the staff or director, which should be held steadily by the assistant, closely hugging the symphysis pubis, so as to draw the neck of the bladder as far as possible from the rectum, the groove in the director being held on a line parallel with the raphe of the perineum. The question would arise in the mind of the operator, not as to how he would be enabled to avoid the pubic arteries and rectum, but rather by operating thus, how is it possible that either the pubic arteries or rectum could be injured; taking care of course not to set the blades of the lithotome too deep, keeping in view the fact that all the surgeon wants is simply a hole in the bladder large enough to admit the end of the index-finger, and relying upon dilating with finger and blade of forceps for extracting stone, in the event the size of stone should require it; and failing in this event to extract it, then always bring the lithotrite to your aid and crush it rather than risk making the opening any larger.

The inexperienced operator will be astonished to find how easily and to what extent the opening in the bladder can be dilated by the finger, or by simply expanding the blades of the forceps; and after the stone is grasped by the forceps he will be equally astonished to find how large a sized stone can by patience and manipulation be withdrawn from a very small opening.—Dr. Benjamin Franklin, *Nashville Journal of Medicine and Surgery.*

THE MEDICAL RECORD.

A Semi-Monthly Journal of Medicine and Surgery.

GEORGE F. SHRADY, M.D., EDITOR.

Published on the 1st and 15th of each Month, by
WILLIAM WOOD & CO., 61 WALKER STREET, NEW YORK.

FOREIGN AGENCIES.

LONDON—TRÜBNER & Co. | LEIPSIC—B. HERMANN.
PARIS—BOSSANGE ET CIE. | RIO JANEIRO—STEPHENS Y CA.

New York, February 15, 1868.

THE CLOSE OF OUR SECOND VOLUME.

IN closing the second volume of the MEDICAL RECORD, we take the opportunity of glancing cursorily at the medical events which have occurred during the past year. Although the record of such doings as interest medical men has not been so full as during the year before, still they are of sufficient moment to merit a retrospective glance, and to afford us an opportunity for some congratulation.

The most important event was the assembling of an International Congress at Paris. The full particulars of this meeting have been already placed before our readers, and the opinion as to its success has been, we think, fully and impartially expressed. The idea of having such a meeting at the time of the great International Exhibition was a good one, and all the leading medical minds throughout the civilized world were much interested in its success. Its failure to meet the requirements for which it was instituted was not due so much to an apathy on the part of some of the few representative men of other countries, and their indisposition to be present at its sessions, as the gross mismanagement of the affair by those of the committee who had the matter in charge. The results of the meeting, however, though they might have been, for obvious reasons, more gratifying and brilliant, were, nevertheless, good enough to warrant, under different auspices, a second undertaking of the sort. In fact the practical value of such an assemblage of scientific men was sufficiently apparent to make this congress a precursor to others, which, although not so large, were at least more successful. Among the latter we may refer to the conference at Weimar, the object of which was the discussion of the prolific subject of cholera.

The regular national medical conventions have been well attended, and the number of working members has so much increased, that a new interest has been infused into such gatherings, giving them a character with the medical public which they were far from possessing heretofore. The American Medical Association has well represented itself among other institutions of its class; and the convention of medical teachers which is its legitimate offspring, has been such a success in the harmony of its workings, as well as in the influence which it is calculated to exert upon the cause of medical education, that a similar society has been formed in Great Britain.

Of the minor societies, we are enabled to say much that is encouraging. All the State Conventions which have been in regular operation are in a most flourishing condition, and many others which have been dormant are resuscitated, while the medical men of our new States and Territories are equally active in initiating suitable measures towards following the example of those of their number in older localities. The local societies have also done equally well, and some new ones have lately been organized, which promise to do much good.

The publication of medical works has been reasonably active; numerous new editions have been issued, and not a few original treatises have made their appearance. Among the latter, without being in danger of making invidious comparisons, we may particularly mention the elaborate, elegant, and useful publication of the Catalogue of the Army Medical Museum, and the comprehensive report embodied in Circular No. 7, treating upon that important operation, amputation of the hip. Side by side with these in point of typographical excellence and superb illustrations, can rank the work on the Micro-chemistry of Poisons by Prof. T. G. Wormley, of Ohio. There are others which approach these in value of contents and neatness of form; but the ones named have such an unquestionable claim for the highest rank, that we think we have a right to allude particularly to them in the light of model publications.

Several new medical journals have made their appearance within the last twelve months, and as far as their editorial management is concerned, they seem to be, what they certainly ought to be, in a flourishing pecuniary condition. In this connection, and as an earnest of the appreciation of the labors of medical editors, we have the gratification of saying, notwithstanding the oft-repeated predictions of many, that not a single one, as far as our own knowledge goes, has ceased to be.

In the matter of progress in the medical sciences, there has been but little done in comparison with former years. Perhaps the most important advance in our knowledge which has been made refers to the views recently promulgated in regard to the inoculability of tubercle. The experiments of Villemin, Lebert, and Simon, have been of exceeding interest, and their results have furnished us with some rather startling facts. A new interest is now manifested in the study of this universally prevalent disease, which interest will in all probability be intensified when the zymotic theory, broached by Dr. William Budd, receives its promised exposition. Beyond these additions to our knowledge, there has been nothing more done, the

workers being engaged in confirming the truth or fallacy of many of those discoveries which have been brought to light within the past two or three years. It is true there are some new instruments offered us, but for the most part they are important modifications of old ones. We might refer in passing to the ingenious speculum of Bozeman as a remarkable addition to our instruments for vaginal examinations.

Death has been savagely busy with the members of our profession, and has greedily claimed more than his usual allotment of medical men. Among the honored names which live now in the past we mention those of Howard Townsend, Caspar Wistar, Benjamin Ogden, C. E. Morgan, Mason Warren, Robert Watts, and Worthington Hooker. But ours has not been the only country which has suffered in this respect. England has lost its Faraday, Brinton, Goodsir, Lawrence, Day, Warington, and Arnot; and France has been called to mourn her Jobert, Velpeau, Civiale, Trousseau, Roger, and Flourens.

With the exception of the appearance of yellow fever during the past summer, and the occasional outbreak of a few scattered cases of cholera, the people of the United States have enjoyed good health. In fact the same may be said of most of the portions of Europe. The rinderpest has practically ceased to be; the cholera did not scourge them as heretofore; and with the exception of the appearance of the epidemic fever in Ireland, nothing worthy of note in that quarter has occurred.

It is, however, useless for us to generalize further on matters which are to be found in detail in the present volume; and in closing these remarks, may we express the hope that our duties, as regards making this journal a medium of all the important discoveries in medicine, surgery, and the collateral sciences, have been satisfactorily performed. In endeavoring to do this, we have received valuable aid, not only from our numerous and talented contributors, but from the following members of our staff: Drs. John Shrady, and D. B. St. John Roosa, of New York; Dr. J. Solis Cohen, of Philadelphia; and Henry M. Lyman, of Chicago—whose readiness at all times and under all circumstances to perform onerous duties, calls from us our most heartfelt thanks. With the same staff, and with an extra determination to increase the usefulness of this journal, by making it a faithful and trustworthy chronicler of all important medical events, we enter upon the third volume.

The meeting of the State Society was an unusually large one, but we are sorry to say that its proceedings were by no means as interesting as usual. Save the addresses of the retiring President, Dr. John P. Gray, and the presentation of a very few rare cases, there was nothing to redeem the dull routine of society business. One or two of the papers read were tedious in the extreme, and we imagine that all were glad when they were finished. But such pertinacity is natural with some, and their enthusiasm leads them so far beyond the pale of propriety, that they are rather to be pitied than blamed.

Socially considered, the meeting was an immense success; and as the result of the kind efforts of our brethren in Albany, every one was made to enjoy himself. The entertainment at the City Hospital by Drs. March and Armsby was an elegant affair, and reflected great credit upon their good sense, taste, and judgment.

The result of the election was in every way satisfactory to all the members. An Association with such an influence and with such a standing as the State Society, should always exercise the greatest care in the choice of its chief officers; and it is pleasing to recollect that for year after year only representative men have occupied the posts of honor. In this respect the coming year will be as those that have passed. Dr. Quackenbush, the President elect, has for a long time occupied not only a prominent position in the profession of his city, but throughout that of the country; and now receives the well-earned, well-merited honor of the highest office in the gift of his brethren of the State. Dr. White, of Buffalo, so long and favorably known as a gynæcologist, has received the office of Vice-President, which, although second in responsibility, is not second in honor to that of the higher office. The industrious and efficient Secretary, Dr. W. H. Bailey of Albany, has been wisely retained in office. The position is the most onerous of all in the gift of the Society, and requires its holder to be specially qualified for it. Dr. Bailey has given ample evidence of his peculiar fitness for the office, and his re-election affords universal satisfaction.

Reviews and Notices of Books.

On the Pathology and Treatment of Albuminuria. By William H. Dickinson, M.D., etc. Longman, Green & Co. London, 1868. 8vo., pp. 265.

There is no branch of medicine in which greater progress has been made within the last quarter of a century than that of renal pathology; and yet, until the time of Bright, this great field of research was veiled in primeval obscurity. Since his day, Bostock, Reese, and Christison, have investigated, with marked success, the chemistry of the diseases which Bright discovered; while Wilks, George Johnson, Roger, Prout, Bence Jones, Harley, Roberts, and others, have contributed greatly by their patient and enlightened labors to elucidate the pathology and indeed the entire subject of renal affections.

The present work of Dr. Richardson must take very high rank among the numerous treatises devoted to this class of diseases; for it is an appeal to observation rather than authority, to facts rather than theory. The different chapters are devoted, 1st, to a description of the healthy kidney; 2d, to albuminous urine and fibrinous casts, in their general relation to the pathology of the kidney; 3d, the pathology of tubal nephritis, together with its clinical history, causes, and treatment; then follow, 4th, the pathology, causes, symptoms, effects, and treatment of granular degeneration; 5th, the pathology of the depurative infiltration, with its symp-

toms, clinical history, and treatment; 6th, comparison of the three forms of renal disease which are productive of albuminuria; 7th, changes of the blood in albuminuria; 8th, alcohol as a cause of renal disease; 9th, climate in relation to the same. All these subjects are graphically and beautifully illustrated by colored plates.

The description of the healthy structure of the kidney requires no special remark. The post-mortem appearances indicative of renal disease are stated to be, 1st, an alteration of the tubes by the accumulation of their contents. They may be widened, perhaps irregularly: they may contain, *first*, a great excess of epithelial growth; they may lose their epithelial lining and become bare; they may become filled with fibrinous matter. *Secondly*, the intertubular fibrous tissue may be increased, particularly near the surface of the organ; which may be detected in a microscopic section, or even by the naked eye, by observing whether or not the surface of the organ is granular. *Thirdly*, there is a peculiar material, which is recognized by the "*amyloid*" reaction with iodine, which starts from the blood-vessels and infiltrates the whole organ, giving it the appearance described as waxy. This is never found except as the result of a peculiar disease. In the classification of renal disease, the author follows an anatomical division, making three distinct varieties, viz.: 1st, disease of the secreting channels; 2d, granular degeneration, or the contracted granular kidney of Bright; 3d, the *waxy* or *amyloid* degeneration, which has its origin in the minute blood-vessels, resulting in an infiltration with a glassy material, poured out by the minute arteries, in consequence of which the organ at first assumes a whitish or anæmic look, increasing in hardness and bulk, till at length it presents a translucent or "waxy" aspect. The grand characteristic of the change is in the action of iodine, which imparts to the new deposit a dark brown color, unlike the yellow tint which the healthy parts of the gland receive from the same reagent; and which change does not take place in any other form of renal disease.

The presence of *albumen and casts* in the urine is traced to, 1st, congestion; 2d, a specific change in the arteries, which renders their walls unnaturally pervious; and 3d, a loss by the secreting tubes of their epithelial lining. We pass over the "pathology" and "clinical history" of "tubal nephritis," to speak of the treatment. The author condemns the practice of general bleeding in this disease, as recommended by Bright and Christison, though he thinks moderate cupping from the loins may sometimes do good, but especially dry cupping. He condemns purging and hot-vapor baths, but speaks favorably of the very free use of pure water and the infusion of digitalis, for the purpose of increasing the amount of urine. After the acute stage is passed, he advises the use of perchloride of iron, followed by acetate of potash. He also speaks favorably of combining this last-named remedy with acetate of iron, or bitartrate of potash with wine of iron; also the citrate of iron and quinine. The more stimulating diuretics, as nitre, juniper, and squills, are to be resorted to if the disease assumes a chronic form. If the dropsy be so severe as to call for mechanical relief, the author advises puncturing with needles instead of the lancet, as less likely to cause erysipelatous inflammation. For the treatment of head symptoms, he recommends small doses of opium, chloroform, active aperients, and diuretics, with the exception of cantharides. He cautions against the use of mercurials, even in small doses. Inflammatory complications are to be treated in such a manner as not to interfere with the management of the primary disease.

The morbid anatomy of *granular degeneration* of the kidney is well described and beautifully illustrated by the colored plates. The different stages of the disease are accurately traced in connection with the causes and symptoms; and especially its complications with heart-disease, pregnancy, blindness, gout, and lead-poisoning, atheroma, etc. Among the accidents of the disease, inflammatory attacks, hæmorrhagic attacks, uræmic poisoning, etc., are particularly discussed. The chemical and other changes in the urine are also pointed out. Every form of the disease is well illustrated by cases. The principal points of treatment in this disease are attention to the secretions of the skin, which must be kept active; the patient should be clothed in flannel, and take much active exercise; resort at regular intervals, say twice a week, to the hot-air or Turkish bath, or the vapor bath, which are most useful where the urine is copious. Besides these measures, it will generally be necessary to give *iron:* the citrate or acetate answers the purpose; with which the acetate of ammonia or acetate of potash may be combined. If the urine contain blood, the sulphate or perchloride of iron may be used. The food should be as non-nitrogenous as is consistent with the proper nutrition of the patient. An entire abstinence from animal food is not recommended. No harm has been observed to follow the moderate use of alcoholic liquors, as gin or wine. Beer is to be forbidden to gouty subjects. The dropsy is to be treated by diuretics, mixed and varied until a suitable one is found. Christison recommends a combination of squills, digitalis, and bitartrate of potassa. The author thinks one of the best is a decoction of scoparium taken freely. If œdema resists the action of such remedies, then the practitioner must resort to purgatives and diaphoretics; as the compound jalap powder twice a week, and occasional vapor baths. For the treatment of stomach symptoms, nitric and hydrochloric acids and strychnia are recommended, given with colombo, or some other mild bitter. Acids are often useful. For vomiting and gastric disturbances, hydrocyanic acid, creasote, brandy, and soda-water, ice, etc., are advised as worthy of trial.

There are some important statistical statements scattered throughout the work, from which we gather the following: Of thirty-nine fatal cases of tubal nephritis, eighteen had hæmaturia; thirty-eight œdema; twenty ascites; eleven hydrothorax; ten uræmic convulsions; ten pneumonia; nine vomiting; eight bronchitis, etc. As to duration of the disease, the younger the patient, the more rapid the course to recovery or death. During childhood the majority of fatal cases terminate during the first month, many within the first week. Few survive the third month, none the fifth. After the age of twenty, no deaths took place within a week, few within the first two months. The greater number of cases terminate after the end of the second month, before that of the sixth.

In forty fatal cases under sixteen, pneumonia was the cause of death in fifteen; pleurisy in ten; uræmic convulsions in five; hydrothorax in three; peritonitis in three; and vomiting in three. Of the age of sixteen and upward, coma or convulsions was the cause of death in five; inflammation of the respiratory organs in two; dropsy in four; peritonitis in two. The urine was greatly diminished in quantity in all. Granular degeneration is almost unknown before the age of twenty. It is most common about the age of fifty. Of 153 cases of fatal valvular disease of the heart, twenty-nine had the kidneys hard, congested, enlarged, but still smooth. In sixty-seven the kidneys had granular surfaces, and more or less contracted cortices. Dr. Barclay also found twenty-eight cases of granular kidneys in seventy-nine cases of valvular disease (Med. Chir. Trans. v. 31, p. 196);

no other form of renal disease has any dependence upon changes in the valves. The disease in a great majority of cases commences in the heart. In reference to pregnancy as a cause of renal disease, in consequence of pressure on the renal veins and vena cava, to which attention was first called by Sir J. Simpson, different writers give different results in regard to the presence of albumen in the urine. Litzman found it present in thirty-seven out of 131 pregnant or lately delivered females; of which twenty-six were primiparæ. Dr. Blot detected albumen in the urine of forty-one out of 205 pregnant women; most of them cases of first pregnancy. It is well known that pregnancy often occasions enough renal congestion to render the urine albuminous; causing various constitutional symptoms, as œdema, disorders of vision, convulsions, headache, etc. But in a vast majority of cases after delivery, the kidneys return to their normal condition. In sixty-nine fatal cases of granular degeneration, sixteen were dependent on or coincident with gout; thirty per cent. of cases are dependent on lead-poisoning. Of forty-two fatal cases in men, treated by the author, twenty-six had distinct granular degeneration of the kidneys; alcohol affects the joints, lead the kidneys. In 250 cases of the disease, the liver was cirrhosed in thirty-seven. In forty-eight per cent. there is cardiac enlargement; in fifty-two per cent. there is atheroma. Hæmorrhagic attacks are often consequent on this disease. Of seventy-five victims of apoplexy examined at St. George's Hospital, thirty-one were found to have had granular degeneration of the kidneys. In another series of cases, Dr. Jones (*British Med. Jour.* 1862) found in thirty-six fatal cases of apoplexy, twenty-nine in which the kidneys were extensively diseased. In twenty-four the organs were small, hard, granular, with thin cortical substances diminished; so that of fatal attacks of apoplexy, one-half at least are preceded by granular degeneration of the kidney. The renal disease induces the cerebral mischief. But we are to consider also that the coats of the vessels themselves are weakened by atheroma; while the force of the left ventricle is increased by hypertrophy. The dimness of vision in this disease is owing to an infiltration of the retina and optic nerve with serum. Usually this disease destroys life by apoplexy, or some inflammatory affection; if not, it ends in uræmic poisoning, when head symptoms are prominent, as coma or convulsions, often resembling narcotic poisoning. The brain, after death, is found completely anæmic. Of sixty-eight fatal cases of this granular disease, under the writer's observation, forty-nine had œdema; twenty-four bronchitis; twenty-three hydrothorax; eighteen ascites; eleven uræmic convulsions; fourteen simple coma; thirteen other head symptoms; sixteen pericarditis; seven pneumonia; seventeen vomiting; thirty-one hypertrophy of the heart; fourteen atheroma, and five amaurosis.

Our space will, however, not allow a fuller analysis of the contents of this highly valuable work; we think it will not suffer by comparison with any previous works on this class of affections.

A Treatise on Therapeutics and Pharmacology or Materia Medica. By Geo. B. Wood, M.D., President of the American Philosophical Society; President of the College of Physicians, of Philadelphia; Emeritus Professor of the Theory and Practice of Medicine in the University of Pennsylvania, etc., etc. Third Edition, in two volumes. Philadelphia: J. B. Lippincott & Co. 1868. 8vo., pp. 1800.

It seems hardly necessary to offer a favorable opinion concerning a work like the one before us, in its third edition, but to those of our readers who may have entered the profession within the last seven years, since which time the second edition made its appearance, a brief notice may be necessary.

At the present time, when fashions in medicine lean towards the employment of a very few and pet remedies, and the estimate of general therapeutics is at such a low ebb, it requires no small amount of courage on the part of an author to offer to the profession such a treatise as Dr. Wood's. But the determination to work faithfully in this much-neglected branch, and the desire to do his part in presenting his subject in a properly scientific and sound philosophical light, has surmounted all other obstacles. If the difficulties usually in the way of the physician acquiring a thorough practical knowledge of the action of medicines and of their special uses, has been the cause of ignorance in this department, they are now virtually removed in this masterly treatise. A peculiar value which the work has consists in the embodiment of the author's extensive and valuable experience with almost every article alluded to in the volumes. The manner of treating the various subjects leaves nothing to be desired. Those which are of most importance have a full space allotted them, and the properties of the articles, physical and chemical, adulterations, and therapeutical effects, are admirably and truthfully described. The action of the medicines receives, as it rightly should, especial mention, and the reader is made conscious in his perusal that he is the recipient of views which are marked with the conservatism of a candid teacher. At the risk of being old-fashioned, and even behind the age, he upholds the virtues of those remedies which years ago he proved to himself possessed a practical value; at the same time, with all the ardor of a youthful mind, he studies the effects of the numerous new medicines which have lately been brought to notice. We would gladly take an opportunity to remark upon the merits of the work in extenso, but space not permitting, we have to bring our short notice to a close, by merely enumerating some of the many new substances which are added to and fully discussed in the present edition:—Coca, nitrous oxide, antimoniated hydrogen, gelseminum, calabar bean, bromine and its preparations, lithia and its compounds, ozone, peroxide of hydrogen, permanganate of potash, and sulphurous acid, and the sulphites with carbolic acid in their antizymotic relations.

We have looked over the book carefully, and are not aware that any new article of the slightest possible practical utility has been overlooked, and take this occasion to congratulate our talented and scholarly author for such a faithful performance of a most onerous yet dutiful task.

The author of the volumes before us has well redeemed the reputation of a faithful worker which he has enjoyed for so many years. The work itself is everything that can be asked for as an exponent of sound views and calm philosophical reasoning.

Headaches, their Causes and their Cure. By Henry G. Wright, M.D., M.R.C.S.L., L.S.A., etc. From fourth London Edition. Philadelphia; Lindsay & Blakiston, 1867. 12mo, pp. 154.

This work gives us, in a clear manner, a brief description of all the different marked varieties of headaches, their symptoms and treatment. The varieties are divided into those of childhood and youth, of adult life, depending respectively on the circulating, digestive and nervous systems, gout and organic disease; and lastly of old age. The distinctions between the different kinds of pains in the head are as well drawn as the circumstances will permit, it being very unfortunate for the purpose of a positive diagnosis in each case that the

symptoms of one variety are apt to run into the other. Our author has, however, by a good arrangement of his subject, reduced this difficulty to a minimum. There is an appendix of formulæ, fifty in number, which will be found very useful to the general practitioner.

THE PHYSICIANS' DAILY POCKET RECORD, comprising a Visiting List, Diary, Day-book of Accounts, etc., etc., etc. By S. W. Butler, M.D. Philadelphia: Office Medical and Surgical Reporter, 115 South Seventh street. 1868.

OUR readers are already so wel acquainted with the intrinsic merits of this Record, that it is unnecessary for us to reiterate the opinion which we took occasion to express a few months since.

CHRONIC DISEASES OF THE LARYNX, with special reference to Laryngoscopic Diagnosis and Local Therapeutics. By DR. ADELBERT TOBOLD, Lecturer in the University of Berlin. Translated from the German, and Edited by GEORGE M. BEARD, A.M., M.D., Lecturer in the University of New York. With an Introduction on the History and Art of Laryngoscopy and Rhinoscopy, Rhinitis, Inhalations and Electrization applied to Diseases of the Air Passages, and an Appendix. By the Editor. Illustrated with forty-four wood cuts. 8vo.

EARLY last year, soon after its publication in Berlin, we received a copy of this work in the original, and have had sufficient time to judge of its merits. We were familiar with the author's Manual of Laryngoscopy published in Berlin in 1863, from which the American editor of the present work has largely drawn in the preparation of the volume before us, so as to adapt it as a guide to the use of the laryngoscope, and operative procedure under its reflecting aid, as well as an exposition of the diagnosis and treatment of chronic diseases of the larynx, as modified since the use of the laryngoscope.

The editor begins his introduction with a succinct and correct history of the invention and early applications of the laryngoscope; follows this by a description of Tobold's illuminating apparatus, which we know from ample experience to be the very best and most convenient yet devised; then follows with brief detailed rules of manipulation for purposes of diagnosis and the method of making local applications; proceeds with a description of the art of rhinoscopy, or examination of the nasal passages; follows this with an entirely original chapter on rhinitis; a chapter on inhalation; and concludes with an original chapter on electrization in diseases of the air passages. Then follows the translation; after which appears an appendix by the editor, describing several instrumental appliances not treated of by Tobold, and concluding with a description of the anatomy of the pharynx, uvula, and soft palate. It will thus be seen that the scope of the entire work is very comprehensive, it being evidently the design of the editor to make it complete as a single treatise on laryngoscopy and laryngoscopal medication and surgery.

The editor's originalities consist in the chapters on rhinitis and electricity. With electricity we have not had any experience to justify us in confirming his observations or in dissenting from them; but as his recent efforts in this department of therapeutics are attracting some attention, we are willing to receive his observations with regard to the electrical treatment of laryngeal affections with a certain degree of authority. Rhinitis, or naso-pharyngeal catarrh, or rhinorrhœa, as it has been variously termed, he attributes in the main to confinement in over-heated rooms, and to smoking. We hardly think smoking a prominent predisposing cause, as it is not usually operative in the female, who is the subject of this disease nearly as frequently as the male; nor can we believe that smoking is as often the cause of laryngeal complaints as is the opinion of many, for in ordinary smoking the smoke is not received into the larynx, and when such an inhalation occurs as the result of voluntary effort, the experimenter will find the immediate effect far different from that experienced in the ordinary enjoyment of the weed. We agree with Tobold that exposure to an atmosphere in which many are smoking is directly deleterious, inasmuch as the smoke being diffused in the atmosphere gains ready ingress to the air passages. Dr. Beard recommends the employment of the posterior nasal syringe in preference to Thudicum's apparatus, which is also described, a point upon which our own experience has led to an opposite conclusion. The best remedy for cleansing purposes, he has found to be a saturated solution of chlorate of potash in tepid water, failing with which to effect a curative process, he employs mild astringent and very weak caustic solutions. The article on inhalations is merely a sketch of the subject, and is evidently not intended to be anything more. The editor speaks in the highest terms of electrization as a method of overcoming the irritation produced by caustic applications to the larynx, a method with which we have no experience, and for which we have not as yet found any necessity. We commend this portion of the introduction to the notice of laryngoscopists, for it presents a subject which is of interest, as being new, and doubtless of considerable value.

Being anxious as early as possible to bring to the notice of the profession an English version of this exceedingly valuable treatise on chronic diseases of the larynx, and familiarity with the original work rendering its reperusal unnecessary, we have not critically examined the translation, which, we presume, has been rendered with fidelity and accuracy.

Tobold presents the subject of chronic laryngitis under the division of simple, ulcerative, and tuberculous; each of which subjects, as also the other chronic affections, he treats of systematically under separate headings of anatomico-pathological appearances, symptoms and causes, etiology, laryngoscopic diagnosis, prognosis, and treatment. We would call attention to his insistance upon a distinction between chronic laryngitis and laryngeal phthisis, a view in which with others we accord. In making local applications, Tobold prefers the sponge to the hair pencil in all but exceptional cases of extremely limited ulceration, an experience with which we coincide; and he attributes, in many instances, beneficial results from the mechanical contact of the sponge. He gives the preference as a local remedy in general to nitrate of silver, and next to that, to tannin; and is by no means an advocate for the use of atomized or nebulized fluids. In the local treatment of laryngeal phthisis, however, he gives tannin the preference over nitrate of silver.

The chapters on paralysis of the muscles of the larynx are very interesting. He describes, and depicts diagrammatically, five different forms of paralysis productive of aphonia, in the treatment of which he employs local electrization, not only after the admirable nitro-laryngeal method of Mackenzie, but also by applying one pole over the cervical vertebra and the other over the course of the inferior laryngeal nerve in the groove between the œsophagus and trachea. In hysterical aphonia he employs the electric moxa on the skin in the neighborhood of the larynx. The chapters on foreign bodies in the larynx, and on the detection and removal of neoplasms, are very complete and explicit; and a number of instruments devised by the author for the purpose of surgical interference are described and depicted, the value of most of which we can attest from personal experience.

There are chapters in the work on the histology and physiology of the larynx, and on the physiology of voice. In treating of the latter subject, but two registers are recognized, the chest and falsetto, the head-register being designated as a modification of the falsetto. We are glad of the opportunity this connection gives us to call the attention of the profession to the researches of a lady of Philadelphia, recently of Berlin, who has lately made several discoveries with regard to the physiology of voice, which appear to show conclusively that there are five separate registers of the voice; namely, two of the chest, two of the falsetto, and one of the head, as demonstrable by changes in the form of the glottis recognizable in the transition, by reflection in the laryngoscope. This lady has also demonstrated as the result of numerous dissections, that the cuneiform cartilages mentioned in Wilson's Anatomy, are the chief agents in the production of the head notes, and that they exist much more frequently in the female larynx than in the male larynx, and that this accounts for the inability in the male voice to produce the head notes, except in rare instances. The views of this lady, Madam SEILER, have been received and endorsed by Helmholtz, Du Bois Raymond, Frerichs, and others of high European authority; and she was an assistant of Helmholtz in many of his recent investigations in the production of sound. Mrs. Seiler has now passing through the press of Messrs. Lippincott & Co., of Philadelphia, a work on the culture of the human voice, based upon her own anatomical investigations and experiments with the laryngoscope, which contains chapters on the physiological and physical production of vocal sound, of exceeding interest to physiologists and laryngoscopists, although the book is prepared chiefly with reference to the art of cultivating the voice, and is therefore not intended at all as a medical work; but to the physician interested in the subject of laryngoscopy, and the physiology of the voice, we recommend in advance of its publication a perusal of Mrs. Seiler's forthcoming volume.

The work before us is amply illustrated by wood-cuts, both in the translation and in the additions of the editor; and it will be seen from our remarks that we feel indebted to Dr. Beard for producing this monograph of Tobold in the vernacular, as well as for enhancing its value to the general practitioner by the addition of matter, original and selected, which should render it, in its present form, an excellent guide for the study and practice of laryngoscopy.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Nov. 27, 1867.

DR. H. B. SANDS, President, in the Chair.

LITHOTOMY.

DR. KRACKOWIZER presented a stone which he had removed about a fortnight ago from a man, sixty-two years of age. The patient came to this country thirty years ago. While in Germany he was a wine merchant, and, although a man of temperate habits, he was obliged to take considerable quantities of wine. He was, however, none the worse for it. When he came to this country he engaged in the clothing business, and became a man of excellent habits. The original symptoms of stone dated back nine years. He sometimes was free from them for half a year, and sometimes longer until the last six weeks, when he was troubled with them oftener, the urine being turbid, and sometimes bloody.

On introducing the sound, the stone was struck immediately. After having satisfied himself as to its presence, the doctor tried to measure its size by drawing the instrument across its surface. It was by this means made out to be an inch in length.

The patient being very fat, the finger could not reach above the upper border of the prostate gland. Dr. K. determined to perform median lithotomy, the operation practised many times by Dr. Markoe. The operation was very easy. He found no difficulty at all in getting into the bladder. The stone, however, could not be grasped to advantage at first, and after repeated attempts it was broken and removed piecemeal. The patient was treated in the same manner as laid down by Dr. Markoe in his paper on this subject in the *N. Y. Medical Journal*. Thirty-six hours after the operation the patient was able to pass a good deal of water through the natural passage; after four or five days it came through only by drops, and on the ninth day, during the passage of two ounces of urine, only eleven drops escaped through the wound. On the eleventh day all the water was passed per urethram.

In conclusion, he would merely state, as had the originator of the operation, that if the stone be too large to be easily extracted, it ought to be broken and taken away in pieces. In this instance he should have followed this advice if it had not been broken by the instruments in the first efforts.

The stone was more or less rounded, was covered with warty excrescences, and was about an inch and a quarter in circumference. It was probably formed of oxalate of lime.

EXTIRPATION OF UTERINE TUMOR.

DR. E. DELAFIELD presented an abdominal tumor on behalf of Dr. Fetter.

"The tumor which I have the pleasure of presenting to the New York Pathological Society, was removed from the person of Mrs. T., of this city, aged fifty-nine years.

"It was removed on the 20th of this month by Dr. Atlee, of Philadelphia.

"The exact particulars of the case at its commencement I am not able to give, but have been informed that the first appearance of the tumor was about ten years since.

"During the last five years it increased very rapidly in size, the great pressure of the same interfering very much with the respiratory and digestive organs.

"The measurement of the abdomen at its largest circumference, previous to the operation, was five feet, and from the sternum to the umbilicus twenty-one inches; from thence to the pubes, fourteen inches.

"Two weeks previous to the operation for removal she was tapped, and sixty pounds of fluid, very thick and purulent, were drawn off, after which she again filled up very rapidly, and on the 20th of the month fifty-two pounds more. The tumor weighed forty-eight pounds, making the weight of the mass, at the time of removal, one hundred pounds, and, with the fluid removed two weeks previous, one hundred and sixty pounds. The fluid drawn off at the time of the operation was highly offensive, and small particles of disorganized matter passed through the opening.

"The walls of the uterus were adhering at every part of the tumor, and it seemed as if it would be impossible to separate them.

"The tumor will be found to be ovarian and also fibrous in its character, and the uterus and both ovaries were involved and removed.

"For twenty-four hours after the operation the patient seemed to be very comfortable; there was no

pain; pulse one hundred and twenty; after which time she commenced to sink very rapidly from exhaustion, and died thirty-six hours after.

"Had the operation been performed before the patient lost her stamina, I think she would in all probability have recovered."

Dr. Krackowizer believed that the tumor was purely a uterine one.

Dr. Buck thought that inasmuch as the discharge at the second tapping was purulent and offensive, it should have been an argument against the operation; and the fœtid discharge at the earlier part of the operation should have put a stop to the proceeding.

Dr. Van Buren cited a case which he saw with Dr. James Anderson some months ago. The patient was a young lady who had an enormous collection of purulent fluid in the cavity of the abdomen. This was drawn off by tapping the cyst. The tumor was afterward removed by Dr. Atlee, and he believed that the result was fatal.

Dr. Cutter remarked that the patient recovered.

Dr. Sayre stated that five or six days after the operation the patient was for some days almost in articulo mortis, but eventually she entirely recovered. In that case there was a discharge of pus at the first tapping.

Dr. Van Buren remarked that he had supposed that the case had proved fatal, as at the last account which he had of it the patient was reported as rapidly sinking.

Dr. Markoe stated that a very important question came up in this connection, viz., what was the effect when the uterus and one or both ovaries were removed?

Dr. Sands remarked that the only experience which he had had was centred in one case operated upon at the New York Hospital. His diagnosis was uterine tumor, and the operation was undertaken with the view of removing the mass. He completed the operation with great difficulty, owing to the attachment of the tumor in the cavity of the pelvis. The case proved fatal a few minutes after the operation. In that instance the uterus and one ovary was removed. The section was made through the cervix uteri, and not through the walls of the vagina.

Dr. Bibbins referred to a case of extirpation of the uterus which had been performed in 1849 in this city. The patient in that instance died upon the table.

SUICIDE WITH MATCHES.

Dr. Finnell exhibited a stomach removed from a young female who destroyed herself by a unique process. Being crossed in some love matters, she made a decoction of half a box of lucifer matches and drank it. She died at the end of six hours.

The specimen, for which he was indebted to Dr. Wooster Beach, Jr., showed a mucous membrane covered with patches of intense congestion and redness.

CANCER OF CALVARIUM.

Dr. Loomis presented the calvarium of a German woman, forty-eight years of age, who died in Charity Hospital on the 4th of November. She had been an inmate of the institution for about two months previous to her decease. Her history was a very meagre one, for the reason that she was not considered dangerously sick until two days before her death. This, in fact, was the first time that Dr. Loomis saw her. Previous to this she was supposed to be suffering from chronic rheumatism. She was complaining of pain along the right arm and in the shoulder, and said that she had suffered from it for the last four or five years. She had been in Bellevue twice for treatment, and had at last been sent from that institution to the Island. The pain was more particularly located by her in the muscles of the back and shoulder. There was a puffiness about the face noticeable, which led to the conjecture that Bright's kidney was present.

On questioning her more closely, she remarked that she had a partial loss of power in her left hand. She had only noticed it the day before, but it had become so rapidly marked that at the examination she was hardly able to raise her hand to her head. The left leg was also found to have lost sensation, and there was also a decrease in temperature. No diagnosis of the case was then made, the doctor supposing that he would have an opportunity to do so after further observation. In the mean time the urine was directed to be examined. At the next visit, three days after, he found that she had died forty-eight hours from the time he saw her; that she grew rapidly worse; that the paralysis increased, commencing in the right arm and extending to the right leg and other parts of her body within the next twenty-four hours. She died quietly. She asked for a drink, spoke intelligently, and when the nurse returned the patient was dead.

The autopsy was made in the absence of Dr. Loomis. All the abdominal and all the thoracic organs were healthy except the heart. This organ was the seat of ossification of the coronary artery. There were also atheromatous deposits in the aorta and on the surface of the aortic valves. These, however, were not insufficient. Some hypertrophy of the left ventricle was also present, which together with the aortic lesion was accounted for during life by the existence of the usual physical signs.

On removing the skull-cap to examine the brain, the gentleman engaged with the saw found that it penetrated different portions of the bone with a great deal of ease; more particularly was this the case with the occipital. This softened condition was explained by a mottled deposit of a new material in different parts of the bone; some of these were of cartilaginous hardness, others of muscular consistency, and others as soft as jelly. This change was confined principally to the occipital bone, parietal bones, and right side of the skull. All the other bones in the body were found in a healthy state; neither were any similar deposits found in any of the soft parts; the muscles, however, had undergone a fatty degeneration.

The microscopical characters of the growths were summed up as follows: fibrous bands crossing polygonal-shaped cells from the $\frac{1}{1500}$ to $\frac{1}{1600}$ of an inch in diameter, with nuclei and nucleoli. These cells were granular, and there were free nuclei everywhere present. In conclusion, he exhibited a drawing of the microscopical appearances, by the gentleman who had made the microscopical examination for him.

Dr. Krackowizer did not think that the drawing was a fair representation of bony cancer, but it seemed to him to be more like osteo-malacia.

Dr. Van Buren, in this connection, referred to the case of a man who had come under his observation, and who on post-mortem examination, presented a skull in a similar condition to Dr. Loomis's patient. The patient died with some vague cerebral symptoms, and the bones of his skull were found infiltrated in places to the thickness of an inch or more, with cheesy cancerous material.

Dr. Terry exhibited a portion of epithelial cancer, which had formed in the cicatrix of a tumor of similar character, removed two and a half months before.

THE EFFECTS OF STRICTURE.

He lastly exhibited the bladder, prostate, and portion of the urethra of a man fifty-nine years of age, who had

gonorrhœa twenty-five years ago, followed almost immediately by symptoms of stricture, and very soon after by complete retention of urine. During the greater part of twenty-three years he was obliged to have the catheter passed. In October, 1865, when Dr. Terry first saw the case, he commenced with a number three bougie, and gradually increased the size of the stricture, until a number eight could be admitted. The patient then absented himself until the stricture closed again, when he returned. This he did three or four different times, when the same process of dilatation was resorted to.

The patient died a short time ago, and Dr. Terry obtained possession of the specimen. The walls of the bladder were very much thickened as the result of chronic cystitis. The stricture in the spongy tissue was a long and firm one, divided into two sections, and at the time of death would hardly admit a number four probe. He died of cystitis.

Dr. Post thought that the dilatation could have been carried on still further, and might have relieved the patient perhaps permanently.

Dr. Terry remarked that he would have persevered, but the patient refused to bear the necessary punishment.

The Society then adjourned.

Correspondence.

MEDICAL MATTERS IN PARIS.

(FROM OUR SPECIAL CORRESPONDENT.)

To the Editor of the Medical Record.

Sir—You will remember, no doubt, that at the International Congress the theme which opened the debates, and which occupied a most prominent place in the discussions, was the apparently exhausted subject of tuberculosis. M. Villemin has just offered to the Academy the treatise of which his remarks at the Congress were the abstract, the exposition, and the defence. The researches of this ingenious experimentalist have led him to conclusions differing so widely from those generally adopted, as to excite the curiosity, applause, or indignation of every defender of the medical faith. Hence the report of M. Colin on Villemin's book has been followed by an able and lively discussion of unexpected interest in connection with a disease which had, so to speak, fallen into disuse, and whose victims were regarded as useless incumbrances of the clinical wards in the hospitals.

INOCULABILITY OF TUBERCLE.

The novelty of Villemin's views is manifested on three important points. 1st. Denying the existence of epithelium in the pulmonary alveoli, the physician of Vâl-de-Grace contradicts Reinhardt's assurance that the cheesy masses occupy the air-cells, and ascribes to them the same origin and seat as that generally admitted for the gray granulations, viz. the connective tissue between the alveoli, and around the blood-vessels. These masses are the result of fatty degeneration of the plasmatic elements of the connective tissue, whose proliferation has given rise to the nuclei and small cells characteristic of the centre of the gray tubercle. These last elements invariably degenerate, but not unfrequently the large connective cells on the periphery of the granulation are also invaded while yet undergoing the process of multiplication. In this respect, therefore, Villemin returns squarely to the views of Laennec, who regarded the cheesy masses as softened tubercles.

2d. The most remarkable part of the *Etudes sur la Tuberculose* is that which relates to the experiments on inoculation of tuberculous matter, some of whose results were submitted to the Academy in 1865. Villemin was induced to make these experiments, by observing the histological resemblance of the elements of the miliary tubercle with those of the tubercle of syphilis or glanders. Since they were specific and inoculable, he inferred that the gray granulation might be so as well. The second half of this supposition has been fully confirmed. An immense number of experiments have been performed upon rabbits, by inserting into the subcutaneous cellular tissue fragments of pulmonary tubercles, and in nearly all cases the injection was followed by an eruption of miliary granulations in the lungs, and by the constitutional symptoms of tuberculosis, to which, after awhile, the animals succumbed.

3d. Upon the success of these experiments, the first of any consequence that have ever been made in this direction, M. Villemin bases an entirely new theory of tuberculosis. He claims that what is inoculable must be specific; that tuberculosis belongs, in its character of specificity, to a family of diseases, depending on the substantial introduction into the system of a peculiar animal virus. It is, in short, a definite, virulent, contagious disease, like syphilis and glanders; and the histological similarity between the tumors in the three cases is justified, so to speak, by their family or generic affinity.

Now, as to the reality of the results obtained by M. Villemin in his experiments, there can be no doubt. They have been repeated with equal success by M. Colin, who reports the new treatise to the Academy; their accuracy is acknowledged by M. Cornil, from whose party Villemin has made such a frightful secession. Bouchard, in his review in the *Gazette Hebdomadaire*, and Chauffard and Pidoux in their speeches at the Academy, all admit this striking and unexpected discovery—viz. that tuberculosis, anatomically and clinically characteristic, may be communicated to rabbits and guinea-pigs by inoculation from the tubercles of cattle or human beings.

But the inferences adopted by M. Villemin are extremely contestable and contested, as M. Chauffard by an anatomical, M. Pidoux by a general analysis, successfully disproved the pretended virulence of the tubercular deposit. Chauffard points out that inoculations of specific animal poisons, as those of syphilis, small-pox, hydrophobia, etc., are first made with fluids containing no morphological elements or special characteristics. But Villemin's favorite experiments consisted in *grafting* a definite structure upon the organism. When this structure, sown on soil rendered congenial by the presence of lymphatics, develops itself and excites the surrounding tissues to similar proliferation, it does so in virtue of the laws of development of tumors, which, according to Virchow, depend on the foundation of a tissue by elements coming from another tissue.

2d. A definite period of incubation is essential to the process of virulent inoculation; after which appears local trouble, speedily followed by general symptoms of infection. But M. Colin shows that in the experiments there is no such incubation, and no reproduction of the tubercle on the place where it was inoculated. The tumefaction observed there results from the resistance offered by the tubercle to the dissolving action of altered pus, on account of which some of the matter originally introduced may often be found on the same spot six weeks afterwards. M. Pidoux declares that the tubercle, placed at the base of the scale of heteroplastic formations, multiplying like all inferior organisms, dying speedily, and infecting the locality

with products of decomposition, is in the highest degree incapable of the incubating force, the latent and refractory vitality characteristic of virus.

3d. The gray granulations are possessed of no exclusive power of infection. Villemin himself has produced an eruption of miliary tubercles by inoculation of the cheesy detritus, and even admits this to be the most favorable for the experiment. It is on this fact that he bases the revival of the doctrine of identity between the cheesy mass and the crude tubercle. M. Colin has successfully inoculated various animals, rabbits, guinea-pigs, lambs, calves, and dogs, not only with the cheesy deposit, but with the hard cretaceous tubercle from the lungs of oxen. Clarck has succeeded with ordinary pus; and Empis with pus from puerperal peritonitis, from the surface of Peyer's patches ulcerated in typhoid fever, and from suppurating fibrinous pneumonia. Finally, Lebert has experimented with mineral substances, as mercury and carbon. In all these cases a crop of perfectly characteristic gray, hard, semi-transparent tubercles was obtained in the lungs of the animals submitted to the experiment. It is impossible to imagine a more complete demonstration of the *common* and non-specific origin of the crude tubercle.

4th. M. Colin, in his report, follows step by step the consequences of the inoculations, and shows that for a long time they are purely local. The disease is communicated, not by the general infection of the whole system, but by the implantation of a thorn, whose irritation gradually extends and involves the lungs. The focus of inoculation is presently surrounded by radiating white lines, formed by lymphatic vessels engorged with foreign matters. The ganglia in which these vessels terminate engorge themselves also, and become filled with tubercular granulations, and others in their turn. The ganglia not found on the route traversed by the morbid vessels, remain perfectly sound. From the lymphatic system, the tuberculous matter gains the central organs, probably by the route of the circulation, and is thus gradually deposited in the lungs, liver, spleen, and kidneys. This evolution is exactly that of the gradual propagation of a local evil, not the simultaneous impregnation of the entire organism by a virulent agent.

Colin is so impressed by this local character of the disease artificially produced, that he jumps to the conclusion that natural phthisis is also the result of local mischief, resulting from one or more tubercles that have at some time been introduced into the economy, and after remaining latent for an indefinite period, are suddenly awakened to activity. But this supposition is entirely gratuitous.

5th. M. Pidoux dwells upon Villemin's admission that the yellow tuberculous matter is more active than the gray tubercle. If we assume (which, as we shall presently see, is conceding too much) that this cheesy deposit be in fact a degeneration of the tubercle, a striking contrast becomes apparent between the tubercle and virus. This is more active in its first stages than at the period of its degeneration.

6th. Pidoux also observes that the similarity between the histological structure of the tuberculous tumor and of syphilis and glanders, is really an argument *against* the virulent character of the first affection. For at the moment that the other two diseases have resulted in tumors, they have ceased to be virulent, and have passed into a state of diathesis. Inoculation from those tumors will give rise to neither glanders nor syphilis. Hence this grand foundation-stone of the new theory, and this initial observation of M. Villemin's researches, is wrenched from him, and turned most ingeniously into a powerful argument against his cause.

From this *critique* it appears that inoculation of tuberculous or other matter acts on the lungs (whither it has been brought by the blood, and arrested by the fine network of capillaries), by irritation of the plasmatic cells of the connective tissue. These, proliferating, give rise to the small elements, which, closely crowded together, constitute the gray tubercle. The process is closely analogous to the proliferation of inflammation, which also results in the formation of the small cells and nuclei of pus, which cannot by their form be distinguished from those of the crude tubercle. The difference consists—first, in the intercellular substance, liquid in pus, finely granular in the tubercle; second, in that the fatty degeneration results in cheesy masses for the tubercle, while the pus remains liquid.

In all cases of artificially induced disease the irritation comes, of course, from without, and may be called local. This may occur also, as Pidoux observes, in acquired phthisis, especially in that of miners and others constantly exposed to direct irritation of the lungs. But in constitutional and hereditary consumption the tubercular process is to be regarded simply as the final stage to which all irritative processes in weakly subjects naturally tend to degenerate.

"The impoverishment of the field of nutrition is the first condition of tuberculosis," says Pidoux; "the occurrence of some irritation the second. Nothing is more susceptible of irritation than weakness, nothing so ready to degenerate." Again (for I quote willingly from this able and brilliant discourse in which he old colleague of Trousseau so well justifies his reputation), "tuberculosis is the constitutional alteration, the characteristic and organic heteroplasia of the lymphatic apparatus, the fundamental apparatus of nutrition. This is attacked in the connective tissue, which constitutes its base. When this tissue sustains what Hunter calls the *stimulus of imperfection*, it is excited to proliferations, imperfect, sickly, of an extremely ephemeral vitality, born in fact but to die; such is the tubercle."

Chauffard ingeniously suggests that the ease with which the tubercle may be inoculated depends precisely upon the poverty of its organization. The fecundating tissue, to refer again to Virchow's idea and expression, would need to make less effort to assimilate another to a feebly organized structure, than to one complex, rich, and characteristic; and from this point of view the inoculation of tubercle is more easily comprehensible than that of cancer.

But the existence of an internal cause for tuberculosis, of a diathesis and of hereditary tendency, is denied by M. Villemin, and it is this denial that constitutes the fame of his heresy. He is as frank a believer in the contagious origin of phthisis as a doctor of the sixteenth century, or an Italian or Spanish peasant of the present day. For him *réunions* of consumptives constitute more deadly foci of infection than cholera hospitals, and the lives of the patients sent to Nice and Cannes are terribly shortened by the atmosphere impregnated with emanations from the reeking lungs of their fellow-sufferers.

Upon this point especially does M. Pidoux attack the innovator. He charges him, not unfairly, with having entirely neglected the clinical study of tuberculosis in his absorption in its anatomical pathology. Examination of lungs after death is extremely useful as a means of ascertaining the results of disease and many of its processes, but must usually be incompetent to determine its cause. And it is glaringly illogical to conclude that because in a given case a disease has been artificially produced by inoculation of certain substances from without, therefore all spontaneous cases of the af-

fection depended on the same mechanism. As well argue that capillary bronchitis could only be caused by injection of snuff into the trachea.

Yet precisely to this complexion has come M. Villemin. He formally denies the possibility of any spontaneous alteration of the organism, and insists that all disease must result from the infliction of exterior agents. Thus, from the reformed basis of phthisis, he dares attempt the reform of all pathology. But, as Pidoux observes, all exterior agents would be without effect were it not for a susceptibility on the part of the organism to be affected, which capacity itself constitutes a spontaneity and individuality.

In the meantime M. Pidoux is far from claiming for phthisis that overwhelmingly predestined character with which it is popularly associated. He admits that about one-sixth of all consumptive patients contract the disease in virtue of direct hereditary influence, but that many others are predisposed on account of *transformed* hereditary influence; arthritism, herpetism, syphilis, or scrofula in the parents, tending less to reproduce themselves in the children than to occasion pulmonary tuberculosis.

Similarly, phthisis springs up in the wake of many diseases, which at their height are directly antagonistic to it. This is the case especially with arthritism, whose remains seem as it were to enrich the soil of the economy, and prepare it for phthisis. Such transformation takes place with the same individual. But in hereditary transmission M. Pidoux announces as a sufficiently definite law, the progress of capital or initial diseases, first towards mixed diseases, then those that are ultimate or organic. Thus arthritism, scrofula, syphilis, capital diseases, change into herpetism, neuroses, neuralgias, catarrhs, etc., or mixed diseases; and these in turn degenerate into organic diseases, as tuberculosis, cancer, epilepsy, and incurable degenerations of the nervous centres. M. Villemin entirely denies any connection between scrofula and tuberculosis, which is the more singular as he cannot ignore the readiness with which the lymphatic glands become the seat of cheesy degenerations, such as he identifies with tubercle. It is precisely because he is forced to admit the multiple origin of scrofula, that he seeks to separate it from tuberculosis, of which the specific character must be preserved at all hazards. Pidoux, fully conceding the difference between the two diseases, justly insists on their frequent etiological connections. Scrofula is the initial chronic disease, often superficial, curable, and not an organic malady, although capable of becoming so. Tuberculosis, and especially pulmonary phthisis, are ultimate and organic diseases, too often the final stage of non-tuberculous affection. It is quite as necessary for scrofula as for arthritism or syphilis to degenerate before it gives rise to tuberculosis; patients with scrofulous ulcers are not consumptive, but lymphatic constitutions, delicate, nervous, "civilized," fall an easy prey to phthisis, often because of their escape from the external manifestations of the disease.

Finally, it is unquestionable that a number of persons untainted by hereditary vice of constitution, and uninjured by previous disease, fall victims to consumption on account of exposure to cold, to want, to privations. Pidoux seems to imply that in these cases the disease commences in bronchitis, determining proliferations of alveolar epithelium, which degenerates into cheesy masses, which ultimately excite a crop of tubercles by irritation of the connective tissue. Pidoux, therefore, fully admits the German distinction between pneumonic phthisis and granular phthisis; the last being constitutional, the first accidental, and often extremely rapid. Bouchard adheres also to this view, and sums up the differences between the gray tubercle and yellow masses, which nearly, if not quite, demonstrate their independence of origin. In the first stages of the "cheesy pneumonia," as the yellow masses are called by the new-school pathologists, the alveoli are found partially filled with large pavement cells, which, in spite of M. Villemin's assertions, reveal their epithelial character by being more or less soldered together. The alveoli also contain serous exudation. On the contrary, the first stage of the granulation consists of a mass of small spheric cells, 0^{mm}, 008 in diameter, with the nucleus filling the cavity almost completely, closely pressed against each other. This mass is situated, not in the alveoli, but in the connective tissue at the bifurcation of the blood-vessels. In the second stage of catarrhal pneumonia the liquid is absorbed, the anatomical elements accumulate and become infiltrated with fat, and presently the alveoli are rendered entirely impermeable to the air, and offer on section a smooth level surface uniformly gray and homogeneous. The granulations also submit to the cheesy degeneration, but for a long time retain their form, so that different zones are distinguishable in their mass.

Villemin's second thesis, therefore, which constitutes his remarkable discovery, is everywhere confirmed, and it is an acquired fact that it is possible to produce pulmonary phthisis artificially, by inoculation with tubercular deposit, or with the products of the pneumonia accompanying, determining, or determined by that deposit. But his first theory, that identifies the tubercle and the pneumonia, and his third, which would make of phthisis a specific virulent disease, seem to be sufficiently refutable and refuted.

I only mention in passing the theory of contagion, for that is confessedly based on no clinical facts, but those dubious ones that have already done service for this theory. M. Villemin seems to infer that the contagion of phthisis must be a necessary consequence of its inoculability. But this is evidently a strained conclusion, since the conceivable mode of transmission between human beings must be widely different from that practised by Villemin on his rabbits. The hateful practical consequences of this doctrine of contagion may justify, perhaps, a partiality for M. Pidoux's vehement denunciation of its possibility. I have ventured to devote so much space to this discussion (of which I have endeavored to render the substance, but have been unable to transfer the zest and animation), because it is one of the most important that has taken place in Paris for some time. The daily urgent practical need of interest in pulmonary consumption is so great that even a scientific vagary that should rouse the flagging attention to a worn-out theme, would be of value. This book of M. Villemin's, however, is no vagary or frivolity, as you may judge from the elaborate report that has been made of it to the Academy, and from the spirited debate to which it has given rise. But, in spite of its ability, and the great interest of the experimental researches, it is a reaction in a sorrowful direction. All hopes of curing phthisis depend upon its nature as a general disease of common origin; and the theory which tends to make it specific condemns the physician to inertia, or the vain revival of forgotten specific antidotes. It is with pleasure, therefore, that I find that M. Villemin's arguments are less sound than they are brilliant, imposing, and endowed with the charm of novelty. P. C. M.

PARIS, January 2, 1868.

A RUSSIAN FEMALE PHYSICIAN.—A young Russian lady has just passed her examination as Doctor of Medicine at the University of Lubeck.

DECOLORATION OF IODINE.

To the Editor of the Medical Record.

Sir—During some experiments on iodine, I recently discovered a fact to which I desire to call the attention of the profession.

It has long been a desideratum in therapeutics to deprive the tr. iodine, a remedy of so much value in external and local medication, of the objectionable stain which it leaves on the skin and linen of the patient. The latter is especially complained of by patients for whom this substance is prescribed as lotion, injection, or liniment.

In the skin department of the Demilt Dispensary, Dr. Bluxome was (in 1865) in the habit of using tr. iodine, decolorized by liq. ammoniæ. But as this combination appeared so very irritating as to cause children, to whom it was applied for herpes, etc., to scream most violently, Dr. B. concluded to abandon its use rather than inflict unnecessary pain on his little patients.

Recently (Nov. 1st) your journal contained a notice of the decolorizing property of carbolic acid on iodine, discovered by Dr. Percy Boulton. This "carbolate of iodine" is highly praised in a letter to the *Journal des Connaissances Médicales* as an antiseptic and stimulant, and as such it is doubtless a valuable agent. But in some cases the carbolic acid might be contra-indicated.

I have ascertained that the hyposulphite of soda has the peculiar effect of depriving the iodine of its color, forming a perfectly limpid fluid, which does not form the purple iodide of starch on the linen, nor produce the yellow discoloration of the skin. The hyposulphite having no medicinal effect in the small quantity required for this purpose, the tr. iodine suffers no addition to nor detraction from its therapeutic properties.

I make a saturated solution of the hyposulphite in water, and this is added in proportion of about one-sixth of the tr. iodine. The latter floats upon the former, but through agitation will produce a beautifully clear solution with the properties mentioned.

The solution of the bisulphite answers the same purpose.

If we desire to obtain the effect of the undiluted tr. iodine, we need only dissolve a few small crystals of the hyposulphite, or a little of the powder of the bisulphite in the tincture, and complete decoloration will be the result.

S. Baruch, M.D.

Camden, S. C., Feb. 1, 1868.

BROMIDE OF POTASSIUM IN FUNCTIONAL EPILEPSY.

To the Editor of the Medical Record.

Sir,—I take this occasion to report the following case of *apparent* cure of epilepsy by bromide of potassium:—The subject, a young lady about twenty-five years of age, applied to me a little over a year ago, to know if anything could be done to relieve her from her disease, which she stated had existed for several years; the fits occurring every two or three weeks. On examination, no cause could be found to account for them, and I gave her but very little encouragement as to the result of treatment. Having seen accounts of the action of the bromide in such cases, I mentioned it to her, and she concluded to try it. She has done so from that time to the present, and the result has been, that it is now one year since she has had an attack of the disease. I have delayed reporting the case till now, that I might be sure that the remedy was producing the effect. I have two other cases of epilepsy under the same treatment, and when they have been treated long enough I will report. I have used the bromide in several cases of nervous restlessness, particularly at night, caused by uterine disease, and have derived much benefit from it.

The formula used in the case of epilepsy reported above was as follows:—

℞. Pot. Bromid. ʒ vi.
Ammo. Bromid. ɔ ij.
Pot. B. Carb. grs. xv.
Tinc. Columbo ℥ iss.
Aqua ʒ iij.

Teaspoonful three times daily before eating.

I am, sir, yours respectfully,
Josiah F. Day, M.D.

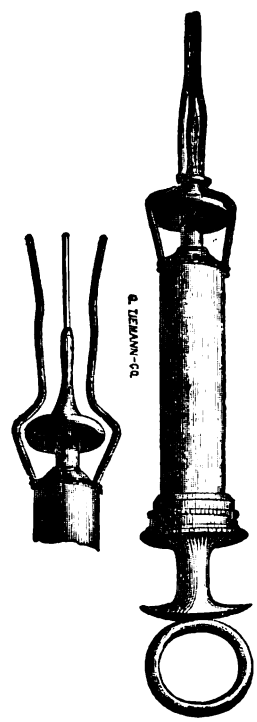
Alfred, Maine, Feb. 1868.

New Instruments.

A NEW SYRINGE FOR THE TREATMENT OF GONORRHŒA.

By M. S. BUTTLES, M.D.,
Adjunct to Chair of Obstetrics, University Medical College, New York.

The accompanying cut represents a syringe made for us, about two years ago, by Messrs. Otto & Reynders, for the treatment of urethritis. The nozzle of the syringe is surrounded by two prongs, so arranged as to admit of being opened by means of a ring or button. The syringe being loaded with a medicated solution, the nozzle with the prongs is introduced into the urethra. The prongs are then separated by means of the ring, so as to dilate the urethra, or rather to put the mucous membrane on the stretch, after which the injection is thrown in, thereby washing out and effectually touching every part of the diseased surface.



By the use of this syringe, with a weak injection, we have cured more than a score of obstinate cases of

gonorrhœa and gleet, which had resisted all the treatment our ingenuity could suggest.

We would recommend this instrument to the profession as specially applicable in chronic cases, in which the inflammation burrows in the folds of the mucous membrane, which ordinary injections or medicines (passing out through the urine) do not, and cannot reach.

We have made some improvements which facilitate the working of this syringe that this cut does not represent, but which we doubt not every intelligent physician will quickly comprehend when he comes to practically apply one of the improved instruments.

Medical Items and News.

PROF. JOSEPH JONES, OF NASHVILLE.—We are pained to hear that the residence of Prof. Jones was recently destroyed by fire, together with many of his most valuable manuscripts.

PROF. AUGUST V. VOGEL.—We notice, in recent exchanges, the death of the celebrated German Chemist, Prof. August v. Vogel, M.D., in his ninetieth year, up to which advanced age he retained the fullest vigor of body and mind. He was the oldest member of the Munich Academy of Sciences, and was particularly distinguished for his analyses of the various mineral waters in his native kingdom of Bavaria.

CHASSEPOT WOUNDS.—Several physicians, who participated in the late Garibaldian campaign, express themselves as follows with regard to the effects of the new chassepot gun. The multitude of missiles which can be scattered over the battle-field in the course of a few minutes, by means of this fire-arm, unquestionably has the effect of putting a large number of troops *hors de combat;* but, by reason of the small size of the projectile, the number of fatal injuries is very small in proportion to the total number of wounded.

It has been established, on observation of the wounded at Mentana and elsewhere, that the Chassepot bullet rarely shatters a bone, but, in the large majority of cases, passes around it..—*Allgemeine Wiener Zeitung.*

CIRCULAR No. 5—SURGEON-GENERAL'S OFFICE—REPORT ON CHOLERA.—Dr. Crane, Assistant Surgeon-General U. S. A., has presented to the King of Prussia a comprehensive report of the course of the late cholera epidemic amongst the U.S. troops. This admirable work has created great interest, and been highly appreciated in military medical circles. The Russian Minister in Washington has received instructions to convey the thanks of the King to Assistant Surgeon-General Crane for this valuable work.—*Allgemeine Med. Central-Zeitung, Berlin.*

Professor ROKITAUSKY, of world-wide reputation, has recently been appointed life-member of the *Herrenhaus*, or House of Lords, of Austria. This recognition of the merit of a professional brother seems to excite the liveliest sentiments of satisfaction in the German medical world, and congratulatory addresses pour in on every side unto the newly made Peer.

PROF. JOSEPH GRUBER.—At a late session of the College of Professors of Vienna, Prof. Hyrtl, one of the first celebrities of our University, proposed, in an able written address, the name of Dr. Joseph Gruber as extraordinary Professor of Aural Medicine and Surgery, on the ground of the high literary attainments of this gentleman, and especially of the great value of his late work on the Membrana Tympani. Dr. Gruber, in view of his valuable services to the public, thousands of whom, every year, had received gratuitous advice from him on diseases of the ear, was recently appointed attending surgeon to the Imperial General Hospital.—*Wiener Medicinische Zeitung.*

OUR GREAT MASTERS.—Dr. B. W. Richardson, of London, in the course of an address on *Research in Medicine*, delivered to the Saint Andrew's Medical Graduates' Association, makes the following eloquent allusion to the few great masters in medicine:—"So great is this limitation that the twenty-three centuries from the Father of Medicine have not brought twenty masters who at this moment are powerful to command. Hippocrates still holds out the natural history of disease; Paulus remains the foundation-stone of surgery; Paracelsus keeps the crucible; Vesalius as yet is the anatomist; Harvey still has his hand on the engine of the circulation; Willis is opening the skull-case and unrolling the brain; Mayo continues to teach that there is a furnace in the animal body burning by the air; Black and Priestley tell the nature of the combustion; Haller adds physics to physic, and Boerhaave scientific chemistry. Pinel puts the psychical upon the physical; John Hunter links the physiology of animals inferior to that of the animal superior; Jenner stands out alone the revealer of a wholesome remedy; Humphry Davy, escaping from his nitrous oxide box, and exclaiming to Dr. Kinglake, 'Nothing exists but thoughts, the universe is composed of impressions, ideas, pleasures, and pains,'—leads the beneficent advance of those who have abolished the horror of the surgeon's knife; and Laennec, pronouncing a diagnostic on such safe physical basis as to leave no improvement on his principles, heads the last of the

> "'Tongues of our dead not lost,
> But speaking from death's frost
> Like fiery tongues at Pentecost.'"

HYPODERMIC INJECTIONS OF MORPHINE, to the number of two hundred weekly, are employed in the cancer wards of the Middlesex Hospital.

M. BRUNETTI, whose method for tanning anatomical preparations has recently been presented to our readers, has obtained a patent for the same.

CONTRIBUTIONS TO MEDICAL JOURNALS.—DR. T. PARVIN, the accomplished editor of the *Western Journal of Medicine*, in remarking upon our recent leader on Medical Authorship, makes the following pertinent comment:—"We have now at least a dozen articles, received within six months, which we will be glad to publish when time occurs for revision. Sometimes, however, such revision costs a subscriber, for there are some men who, actuated by benevolence or love of small notoriety, will send articles abounding in the grossest violations of orthography and syntax—violations such as a child of ten years, who has been properly educated, would not make, and in complicated and involved sentences; and when these articles, subjected to competent medical revision, are rewritten in good English and then published, become virtuously indignant and 'stop the *Journal*.' Publish such an article as sent, and the offence is equally great or greater, and at the same time you disgrace your periodical; decline publishing, and the would-be contributor is just as indignant, and thinks your *Journal* is a poor thing. How can we escape Scylla without running against Charybdis?"

ACKNOWLEDGMENT.—The managers of the Nursery and Child's Hospital of this city acknowledge the donation of five thousand dollars from the estate of the late Chauncey Rose.

CONTRIBUTORS TO VOLUME II.

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THE MEDICAL RECORD.

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EIGHT ADDITIONAL PAGES.

Vol. 2. No. 48. | NEW YORK, FEBRUARY 15, 1868. | $4.00 Per Annum.

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Brunswick, Oct., 1867.

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The PRELIMINARY AUTUMNAL TERM for 1867–68 will commence on Wednesday, September 18, 1867, and continue until the opening of the Regular Session.

The REGULAR SESSION will commence on Wednesday, October 16, 1867, and end about the first of March, 1868. Instruction during the Preliminary Term will, as hitherto, consist of didactic lectures on special subjects, and daily clinical lectures. The lectures in this term are given exclusively by members of the Faculty. Students designing to attend during the Winter Session are strongly recommended to attend during the Preliminary Term, but attendance during the latter is not required.

The SUMMER SESSION will commence on the second Wednesday in March, and continue twelve weeks. This term will embrace courses of didactic lectures by the members of the Faculty of the Summer Session, together with clinical lectures at Bellevue Hospital, and the Charity Hospital, Blackwell's Island, and the daily recitations. Lectures will also be given by members of the College Faculty.

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FEES FOR THE REGULAR SESSION.

Fees for tickets to all the lectures during the Autumnal and the Regular Winter Session, including clinical lectures	$140.00
Tickets for any of the several departments may be taken out separately.	
Matriculation fee	5.00
Demonstrator's Ticket (including material)	10.00
Graduation fee	30.00

Students who have attended two full courses in other accredited schools receive all the tickets for $70, exclusive of the Matriculation Fee. Students who have attended two full courses in this College, or after one full course in this College, having previously attended a full course in some other accredited schools, are required to matriculate only. Graduates of other accredited schools, after three years, dating from the time of graduation to the end of the term, are required to matriculate only; prior to three years, they receive a general ticket for $70.

FEES FOR THE SUMMER SESSION.

Matriculation (valid for the succeeding Winter Session)	$5.00
For each of the separate courses of lectures	10.00
General Ticket admitting to all the lectures	50.00

Graduates of the Bellevue Hospital Medical College will be admitted to the lectures of the Summer Session on the Matriculation ticket; all others will be required to take out tickets.

☞ The dissecting-room will be kept open until about the first of May.

Payment of Fees is invariably required at the commencement of the Session. There are no exceptions to this rule.

Students, on arriving in the city, are requested to report at once at Bellevue Hospital, situated on the East River, between Twenty-sixth and Twenty-eighth streets, and inquire for the Janitor of the College, who will take pains to aid them in securing comfortable accommodations without delay. Entrance to the Hospital is on Twenty-sixth street.

For the Annual Circular and Catalogue, giving regulations for graduation and other information, address the Secretary of the College, Prof. AUSTIN FLINT, JR., Bellevue Hospital Medical College.

For Circular giving information concerning the Summer Session, address the Secretary of the College, or Prof. HENRY D. NOYES, No. 68 Madison Avenue, Dean of the Summer Faculty.

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IN THE PLAN OF INSTRUCTION adopted in this Institution, Clinical Teaching constitutes an important and prominent feature, all the practical subjects treated of in the Didactic Course being fully illustrated at the bedside. In the furtherance of this object, the extensive Hospitals of New York, of which the New York Hospital, the Bellevue Hospital, the Charity Hospital, Blackwell's Island, and the New York Eye Infirmary, are the largest and most efficient, furnish ample fields for instruction and study.

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In the Bellevue Hospital, by Professors CLARK, MARKOE, METCALFE, THOMAS, and SANDS.
In the New York Hospital, by Professors MARKOE and SANDS.
At the Charity Hospital, Blackwell's Island, by Prof. BUMSTEAD and Dr. MASON.
At the New York Eye Infirmary, by Dr. MASON.

Besides the Clinical Lectures given at the Hospitals, as above, there are seven Cliniques each week, at the College Building, viz.:

Surgical Clinique, by Prof. MARKOE, every Monday at 12 M.
Medical Clinique, by Prof. CLARK, every Thursday at 12 M.
Surgical Clinique, by Prof. DETMOLD, every Wednesday at 3 P.M.
Venereal Clinique, by Prof. BUMSTEAD, every Monday at 3 P.M.
Ophthalmic Clinique, by Dr. AGNEW, every Tuesday at 3 P.M.
Clinique for Diseases of Skin, by Dr. DRAPER, every Thursday at 3 P.M.
Female Clinique, by Prof. THOMAS, every Friday at 3 P.M.

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IN PRACTICAL OBSTETRICS, each advanced student in the College has one or more cases assigned to his *exclusive* care, and may thus become practically familiar with this important branch, in all its details. Should any abnormal or difficult case occur, the student has the privilege of sending for the Professor of Obstetrics, who then takes charge of the patient and embraces the opportunity of giving clinical demonstrations of the most approved method of treatment.

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The Tickets are to be taken at the beginning of the Session.

Students who have attended two full courses in this College, or who, having attended one full course in some regularly established medical school, shall *subsequently* attend one full course in this College, are admitted to a third course of lectures on paying the matriculation fee only.

Graduates of this school are admitted without fee. Graduates of other regular schools, who have been in practice three years, and *Theological Students*, are admitted on general ticket, by paying the matriculation fee.

Recent Graduates of other regular schools, and students who have already attended two full Courses of Lectures, are admitted to this College on payment of the Matriculation Fee and $70.

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Matriculation (paid but once)	$ 5 00
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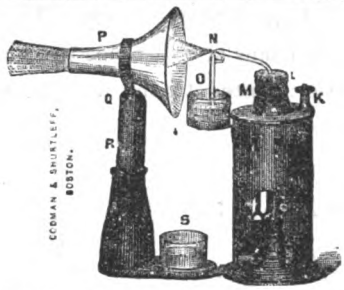

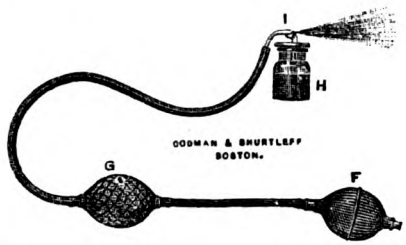

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CONCENTRATED TINCTURES, ETC.,

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B. KEITH & CO., NEW YORK.

CONCENTRATED MEDICINES; OR, ACTIVE PRINCIPLES OF MEDICINAL PLANTS.

The list embraces many preparations from Crude materials of recognized officinal medicinal value. Others, though comparatively new to the profession, are fast gaining confidence in their remedial powers.

Each preparation represents the full therapeutic virtues of the crude substance from which it is derived.

They are *definite* in constitution and therapeutic power, *uniform* in medicinal strength, *reliable* in clinical practice, and *not liable* to vary, change, or deteriorate by age.

We prepare no lactinated articles, nor triturations with foreign substances of any kind.

They are put up in bottles of one ounce avoirdupois, and securely sealed to protect them from the action of the atmosphere.

POWDERS.	PER OZ.
Aconitin	$5 00
Ampelopsin	2 50
Alnuin	1 25
Apocynin	3 00
Atropin	5 00
Asclepin	2 25
Baptisin	1 50
Barosmin	4 00
Caulophyllin	1 25
Cerasein	1 25
Chelonin	2 00
Chimaphilin	1 25
Collinsonin	3 00
Colocynthin	3 00
Cornin	1 50
Corydalin	6 00
Cypripedin	2 50
Digitalin	1 75
Dioscorein	2 50
Euonymin	2 50
Eupatorin (perfo.)	1 50
Eupatorin (Purpu.)	3 00
Frazerin	1 50
Gelsemin	6 00
Geranlin	1 25
Gossypiin	3 00

POWDERS.	PER OZ.
Hamamelin	$1 50
Helonin	5 00
Hydrastin	3 50
Hyoscyamin	5 00
Irisin	1 50
Jalapin	—
Juglandin	1 50
Leontodin	3 00
Leptandrin	1 30
Lupulin	1 50
Lycopin	1 75
Macrotin	1 25
Menispermin	2 00
Myricin	1 25
Phytolacin	2 00
Podophyllin	1 25
Populin	1 25
Prunin	1 25
Rhein	—
Rhusin	1 75
Rumin	2 25
Sanguinarin	1 75
Scutellarin	2 25
Senecin	2 75
Smilacin	3 50
Stillingin	4 00

POWDERS.	PER OZ.
Strychnin	—
Trillin	$1 50
Veratrin	3 00
Viburnin	2 25
Xanthoxylin	2 50
PILLS.	
Xanthoxylin in Pills	0 75
Comp. Podophyllin Pills	1 50
OILS.	
Oil of Capsicum	1 25
" Erigeron	75
" Populus	50
" Stillingia	1 50
" Solidago	75
" Xanthoxylum	75
" Lobelia	2 50
Oleo-Resin of Lobelia	1 00

Pocket Medicine Cases filled with Concentrated Medicines.

No. 1, containing 20 vials	$6 00
No. 2, " 24 "	7 00
No. 3, " 28 "	8 00

CONCENTRATED TINCTURES.—These tinctures are among the greatest improvements in modern pharmacy, and embrace the peculiar features for which our preparations have become so celebrated. They combine the essential qualities of definiteness, uniformity, and reliability. The various proximate active principles are isolated singly, divested of all non-medicinal admixture, carefully estimated and redissolved in alcohol in exact proportions. Hence, they resemble a definite solution of Morphia, Quinia, or any other definite vegetable alkaloid, and invariably represent a uniform amount of therapeutic power. They are concentrated, definite solutions of the entire medicinal constituents of the plants from which they are severally derived.

They are much Stronger than any other Fluid Preparations made from the same Articles.

	In 2 oz. bottl's.	In lb. bottl's.
Conc. Tinc. Aconitum Nap	$0 60	$3 50
" " Ampelopsis	50	3 00
" " Apocynum Can	75	4 50
" " Atropa Bella	75	4 50
" " Asclepias Tub	60	3 50
" " Baptisia Tinct	40	2 50
" " Barosma Cren	60	3 50
" " Cannabis Ind	50	3 00
" " Caulophyllum	35	1 75
" " Chelone Glab	50	3 00
" " Cornus Flor	40	2 50
" " Corydalis Form	1 25	8 00
" " Cypripedium Pub	60	4 00
" " Digitalis Purp	40	2 50

	In 2 oz. bottl's.	In lb. bottl's.
Conc. Tinc. Euonymus Am	$0 50	$3 50
" " Collinsonia Can	60	4 00
" " Eupatorium Purp	50	3 50
" " Gossypium Herb	75	5 00
" " Gelseminum S	1 00	6 00
" " Humulus Lupulus	40	2 50
" " Hyoscyamus Nig	75	4 00
" " Hydrastis Can	75	4 50
" " Iris Versicolor	40	2 50
" " Ipomœa Jalapa	1 00	7 50
" " Leptandria Vir	50	3 00
" " Lycopus Vir	50	3 50
" " Macrotys R c	35	1 75
" " Podophyllum Pelt	35	2 00

	In 2 oz. bottl's.	In lb. bottl's.
Conc. Tinc. Rhus Glab	$0 50	$3 50
" " Sanguinaria Can	40	2 50
" " Scutellaria Lat	50	3 50
" " Senecio Crac	50	3 50
" " Stillingia Syl	1 00	7 00
" " Veratrum Viride	75	4 50
" " Xanthoxyllum Frax	35	2 00
Bronchitis Drops	1 00	5 00
Conc. Comp. Stillingia Alterative	1 50	10 00
Wine Tr. Lobelia inflata, 6 oz. bottles		1 50
In pint bottles		3 50
Conc. Tinc. Veratrum Vir., 4 ozs.		1 25
" " Gelseminum, 6 ozs.		2 50

MANUAL OF THE ACTIVE PRINCIPLES OF INDIGENOUS AND FOREIGN MEDICINAL PLANTS. Furnished free on application.

CONCENTRATED ORGANIC MEDICINES. A Treatise on Concentrated Medicines, by Grover Coe, M.D. Pp. 446. Price $1.25. Postage, 24 cents. Address

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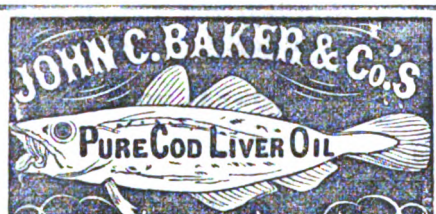

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Vinum Xeres	1 Litre (2.11 pts.)
Colomba	ʒ 1
Gentian Lutea	ʒ 2
Absinthium Art.	ʒ 1
Cinchon. Pulv.	ʒ 4
Galanga	gr. 24

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An extract from an article in the "Home Journal," of May 1, 1867, on Wines, may appropriately be introduced in this connection:

"And without doubt, a careful preparation having a pure wine for its base, in which a proportion of these tonics (named before) is scientifically infused, would be a beverage as beneficial for family use as for the physician. * * * The tissues in contact with the nutritious blood have a tendency to appropriate to themselves the elements most proper to maintain their healthy condition, or to alter it when unhealthy. The hygienic virtues of such a wine cannot be over-estimated."

It is put up handsomely in large-sized clarets, and retails at the very low price of $1.50 per bottle.

You are respectfully solicited to try one case, feeling confident that you will be as well pleased with it as others who have tried it.

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It would be a work of supererogation to call the attention of the Profession to the utility of Saline Febrifuges and Purgatives in a large class of diseases. Its members are well aware (to use the language of Dr. John Bell, one of the most distinguished pathologists and surgeons of modern times) that "of all the prescriptions made up with a view to alterative effect, none can be compared with Mineral Waters."

This being the case, we have no hesitation in recommending

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to the favorable consideration of physicians and surgeons. Its composition is based on a qualitative and quantitative analysis of the water of the celebrated Seltzer Spring, of which it contains all the essential ingredients in their due proportions, without any of the inert matter found in the material fluid. It is believed to be the best Saline Aperient and Alterative known, and is considered by eminent members of the Profession a valuable medicine in all phases and types of disease to which preparations of this class are adapted. As a means of alleviating all maladies in tropical climates it has been found peculiarly valuable.

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Each teaspoonful of the Elixir contains one grain of the Salt of Phosphorus and Iron, and each pint contains one ounce of Royal Calisaya Bark.

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